TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1917

No. 237 14

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON, PETITIONERS,

vs.

DENT HARDWARE COMPANY

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT

PETITION FOR CERTIORARI FILED NOVEMBER 14, 1916

CERTIORARI GRANTED JANUARY 8, 1917

(33,459)

(33,856)

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1928.

No. 547

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON, PETITIONERS,

vs.

DENT HARDWARE COMPANY

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT

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IN THE

District Court of the United States,

FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

IN EQUITY.

No. 3999. March Term, 1927.

ALEXANDER F. WINTERS and BASIL R. CRAMPTON	Cyrus N. Anderson, Esq.,
v.	
DENT HARDWARE COMPANY.	E. Hayward Fairbanks, Esq.

DOCKET ENTRIES.

Mar. 15, 1927.	Bill of Complaint, filed.
" " "	Subpœna exit—returnable April 4, 1927.
" " "	Affidavits in re: Motion for Preliminary Injunction, filed.
" " "	Motion for Preliminary Injunction, filed.
" " "	Exhibit A filed.
" " "	Notice of Hearing, filed.
" " "	Decree fixing time for hearing Motion for Preliminary Injunction, filed.
" 16, "	Plaintiffs Exhibits B, C and D, filed.
" 17, "	Printed copy of Bill of Complaint, filed.

Mar. 24, 1927.	Appearance of E. Hayward Fairbanks, Esq., for Defendant, filed.
Apr. 4, 1927.	Subpœna returned—on March 18, 1927, served and filed.
" 27, "	Answer, filed.
May 6, 1927.	Reply Affidavit of B. R. Crampton, in re: Motion for Preliminary Injunction, filed.
" " "	Reply Affidavit of F. E. Liverance, Jr., in re: Motion for Preliminary Injunction, filed.
" 18, "	Trial.
July 20, 1927.	Trial concluded.
Aug. 2, 1927.	Copy of Certificate to Comm. of Patents, filed.
" 11, "	Opinion, Dickinson, J., filed.
" 12, "	Decree dismissing Bill of Complaint—costs to defendant, filed.
Oct. 10, 1927.	Assignments of Errors, filed.
" " "	Petition for Appeal and Decree granting prayer of Petition, filed.
" " "	Sum of $250, deposited in Registry of Court in lieu bond sur Appeal.
" " "	Præcipe for transcript of record sur Appeal, filed.
" 11, "	Citation allowed and issued.
" 17, "	Citation returned "service accepted" and filed.
" " "	Plaintiffs' Statement of evidence in narrative form, filed.
" " "	Stipulation in re: Narrative Statement of testimony and Decree approving same, filed.

BILL OF COMPLAINT.

(Filed March 15, 1927.)

IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

IN EQUITY.

No. 3999. March Term, 1927.

Alexander F. Winters and Basil R. Crampton,
Plaintiffs,

v.

Dent Hardware Company, a Corporation,
Defendant.

FOR INFRINGEMENT OF UNITED STATES LETTERS PATENT No. 1,385,102.

ALEXANDER F. WINTERS and BASIL R. CRAMPTON, residents of the City of Grand Rapids, in the County of Kent and State of Michigan, and citizens and inhabitants of said State, bring this their bill of complaint against DENT HARDWARE COMPANY, a corporation which, plaintiffs are informed and believe, was organized and exists under and by virtue of the laws of the State of Pennsylvania and has its office and principal place of business in the City of Fullerton, County of Lehigh, and State of Pennsylvania, within the Eastern District of Pennsylvania, and complain and say:

I. This cause arises under the patent laws of the United States, being a suit to restrain infringement of certain hereinafter named Letters Patent of the United

States and for an accounting and profits and damages arising from said infringement; wherefore this court has jurisdiction.

II. Heretofore, and prior to December 7, 1920, Alexander F. Winters and Basil R. Crampton, being then, as now, residents of the City of Grand Rapids, in the County of Kent and State of Michigan, were the original, first and joint inventors of certain new and useful improvements in LATCH, which improvements were not known or used by others in this country before their invention thereof, and were not patented or described in any printed publication in this or any foreign country before their invention thereof, and were not in public use or on sale in the United States or described in any patent or printed publication anywhere for more than two years prior to their application for patent therefor in the United States, and were not patented in any country foreign to the United States on an application filed by them or their legal representatives or assigns more than twelve months prior to their application for patent therefor in the United States, and which had not been abandoned.

III. The said Alexander F. Winters and Basil R. Crampton, being as aforesaid, the original, first and joint inventors of said improvements, made application in due form of law on the seventh day of December, 1920, to the Commissioner of Patents for the grant of Letters Patent of the United States for the said improvements; whereupon, after due proceedings were had, Letters Patent No. 1,385,102 for said improvements, duly sealed, countersigned and executed, were issued to said Alexander F. Winters and Basil R. Crampton whereby there was vested in them, their legal representatives and assigns, for the term of seventeen years from and after the nineteenth day of

July, 1921, the exclusive right to make, use and vend said improvements throughout the United States and territories thereof, the original of which patent or a duly certified copy thereof is ready to be produced in court.

IV. By virtue of the premises, plaintiffs became, are now, and have been at all times since the nineteenth day of July, 1921, joint and exclusive owners of said Letters Patent No. 1,385,102 and the inventions therein described, disclosed and claimed and of all rights and privileges granted and secured thereby. Plaintiffs are owners of 98 per cent. of the capital stock of the corporation, Winters & Crampton Manufacturing Company, a corporation of the State of Michigan, located at Grand Rapids, Michigan, where the latch, shown, described and claimed in said Letters Patent No. 1,385,-102, is manufactured and sold; and which has in the past been manufactured and sold by said corporation and by its predecessor, Winters, Stryker & Crampton. Large sums of money have been invested and expended and great trouble and expense in and about said invention has been borne for the purpose of developing the same and introducing it into use and making the same profitable to plaintiffs and the corporation with which they are connected and useful to the public. Said corporation is equipped and has the necessary capital and facilities for supplying all demands for the invention under said patent, promptly and at a reasonable cost. Plaintiffs have fully advised the public and the defendant of its ownership of said patent aforesaid, notwithstanding which said defendant persisted in infringement after said notice.

V. The latch construction developed by plaintiffs is very useful, attractive in appearance and effective

mechanically so that it has had sale in large quantities and was immediately eagerly accepted by refrigerator manufacturers, displacing other types of latch construction before used by them. Great commercial demand for the latch constructions in accordance with the aforesaid patent of plaintiffs was created and in a very short time large orders for said latch constructions were received and have been received continuously since about the first of the year 1921 to the present time.

VI. The defendant, well knowing the premises, has manufactured and sold a latch construction which is made in such close imitation of plaintiffs' latch as manufactured and as disclosed by said patent aforesaid, that differences in the two are not discernible to ordinary observers, and has infringed said patent aforesaid by manufacturing and selling latch constructions for use on refrigerators in the Eastern District of Pennsylvania and elsewhere throughout the United States prior to the commencement of this suit and since the date of issue of said Patent No. 1,385,102. And this defendant is still manufacturing and selling said latches and threatens to do so in the future. Defendant plans to interfere and has interfered with the business which plaintiffs have, at great expense and effort, developed in the manufacture and sale of devices made in accordance with the said patent aforesaid and has infringed said patent, all in defiance of the rights secured to the plaintiffs and to their great and irreparable loss and injury and whereby plaintiffs have been, are still being, and will be so long as such infringement continues, greatly and irreparably damaged and injured and deprived of profits which plaintiffs would otherwise make under said patent.

VII. The plaintiffs heretofore brought suit under said patent aforesaid against Sanitary Refrigerator Company, a corporation of Wisconsin located at the City of Fond lu Lac, Wisconsin, which suit was defended by the Dent Hardware Company, defendant herein, said Dent Hardware Company employing its own counsel, and officers and employees thereof giving evidence on behalf of the then defendant, Sanitary Refrigerator Company. Said suit was heard on the eighteenth and twenty-first days of February, 1927, and at the end of the hearing Judge Geiger, of District Court of the Eastern District of Wisconsin, rendered an opinion sustaining said patent as to its validity and holding that the refrigerator latches used by the Sanitary Refrigerator Corporation were an infringement of said letters patent aforesaid. A decree in conformity with said opinion was entered on the twenty-fourth day of February, 1927, a certified copy of which is ready to be produced in court.

VIII. The latches used by said Sanitary Refrigerator Corporation and which were held in infringement of plaintiffs' letters patent aforesaid, were manufactured and sold by said Dent Hardware Company. The Dent Hardware Company manufactures these latches in various sizes and has persistently solicited refrigerator manufacturers with respect thereto, has reduced prices which plaintiffs have had to meet to a greater or less extent in order to save business in such latches, and have generally, greatly and irreparably damaged and injured plaintiffs by its infringement of said patent and have deprived plaintiffs of profits which would otherwise have been received, and have secured great gains and profits itself, which, in equity, belong to plaintiffs and should be accounted for by said defendant and paid to plaintiffs.

IX. Plaintiffs are without adequate remedy, save in a court of equity, where matters of this nature are properly cognizable.

X. Plaintiffs pray: (1) That defendant be required to answer this bill of complaint, but not under oath, answer under oath being expressly waived; (2) That a subpœna, *ad respondendum* be issued by the clerk of this court, directed to the defendant to answer the bill of complaint; (3) That a preliminary injunction be issued restraining the defendant, its officers, agents, employees and confederates from infringement of the aforesaid letters patent during the pendency of this suit; (4) That a permanent injunction be issued restraining the defendant, its officers, agents, employees and confederates from any further infringement of the aforesaid letters patent in suit; (5) That defendant account for and pay to plaintiffs its profits and plaintiffs' damages arising from said infringement, and (6) That plaintiffs have such further relief as the premises and equities may require.

ALEXANDER F. WINTERS,
BASIL R. CRAMPTON.

CYRUS N. ANDERSON,
Solicitor for Plaintiffs.

FRANK E. LIVERANCE, JR.,
Counsel for Plaintiffs.

STATE OF MICHIGAN,
COUNTY OF KENT, } *ss.:*

ALEXANDER F. WINTERS, being first duly sworn, deposes and says: that he is one of the plaintiffs named in the foregoing bill of complaint; that he has read said bill of complaint and knows the contents thereof; and that same is true to the best of his knowledge, information and belief.

Subscribed and sworn to before me this 8th day of March, 1927. } ALEXANDER F. WINTERS.

GEORGE HOLLOWAY,
(Seal) *Notary Public,*
Kent County, Mich.
My commission expires July 25, 1928.

STATE OF MICHIGAN,
COUNTY OF KENT, } *ss.:*

BASIL R. CRAMPTON, being first duly sworn, deposes and says: that he is one of the plaintiffs named in the foregoing bill of complaint; that he has read said bill of complaint and knows the contents thereof; and that same is true to the best of his knowledge, information and belief.

Subscribed and sworn to before me this 8th day of March, 1927. } BASIL R. CRAMPTON.

GEORGE HOLLOWAY,
(Seal) *Notary Public,*
Kent County, Mich.
My commission expires July 25, 1928.

ANSWER.

(Filed April 27, 1927.)

To the Honorable, the Judges of the Above-Entitled Court:

The answer of the above-entitled defendant to the bill of complaint exhibited against it by the above-named plaintiffs.

I. Defendant admits the averments respecting its incorporation, and place of business.

II. Defendant admits that this cause arises under the patent laws of the United States, and that this Court has jurisdiction.

III. Defendant admits that prior to December 7, 1920, Alexander F. Winters and Basil R. Crampton were residents of the City of Grand Rapids, in the County of Kent, and State of Michigan, but denies that said plaintiffs were the original, first and joint inventors of certain new and useful improvements in a latch; denies that said improvements were not known or used by others in this country before their invention thereof; denies that they were not patented or described in any printed publication in this or any foreign country before the invention thereof; denies that they were not in public use or on sale in the United States or described in any patent or printed publication anywhere for more than two years prior to their application for patent therefor in the United States; denies that they were not patented in any country foreign to the United States on an application filed by them or their legal representatives or assigns, more than twelve months prior to their application for patent therefor in the United States and denies that said improvements have not been abandoned.

IV. Defendant admits that said Alexander F. Winters and Basil R. Crampton made application on the seventh day of December, 1920, to the Commissioner of Patents for the grant of Letters Patent of the United States for the said improvements, and admits that after due proceedings were had, Letters Patent No. 1,385,102, for said improvements duly sealed, countersigned, and executed were issued to said Alexander F. Winters and Basil R. Crampton, but defendant denies that said letters patent were issued in due form of law, and denies that there was vested in them, their legal representatives and assigns, for the term of seventeen years from and after the nineteenth day of July, 1921, any exclusive rights and allege the contrary to be true.

V. Defendant denies that the plaintiffs are now and have been at all times since the nineteenth day of July, 1921, joint and exclusive owners of said Letters Patent No. 1,385,102, and the inventions therein described, disclosed and claimed and of all rights and privileges granted and secured thereby, and leave plaintiffs to make full proof thereof. Defendant has no knowledge whether or not plaintiffs are owners of 98 per cent. of the capital stock of the corporation, Winters and Crampton Manufacturing Company, where it is alleged that the latch of said letters patent has been manufactured and sold and leaves plaintiffs to make full proof thereof. Defendant denies that large sums of money have been invested and expended and great trouble and expense in and about said invention have been borne for the purpose of developing the same and introducing it into use and making the same profitable to plaintiffs and the corporation with which they are connected, and useful to the public. Defendant denies that said corporation is equipped and has the necessary capital and facilities for supplying

all demands for the invention under said patent, promptly, at a reasonable cost and at maximum efficiency. Defendant denies that plaintiffs have fully advised the public and the defendant of its ownership of said patent aforesaid, and denies that the defendant has persisted in infringement of any valid claim of said patent after notice.

VI. Defendant denies that the latch construction developed by plaintiffs is very useful, attractive in appearance and effective mechanically, and denies that it had an immediate sale in large quantities and was eagerly accepted by refrigerator manufacturers, displacing other types of latch constructions before used by them. Defendant denies that great commercial demand for the latch constructions in accordance with the aforesaid patent of plaintiffs as created and denies that in a very short time large orders for said latch constructions were received and have been continuously received since about the first of the year 1921 to the present time.

VII. Defendant denies that it has manufactured and sold a latch construction closely imitating plaintiffs wherein the differences are not discernible to ordinary observers; defendant denies that it has infringed the patent in suit since the issuance of said patent in the Eastern District of Pennsylvania or elsewhere.

Defendant denies that it plans to interfere and has interfered with the business which plaintiffs have developed, and denies that it has infringed said patent in defiance of plaintiffs' rights, and denies that plaintiffs have been greatly and irreparably damaged or are being so damaged, and that plaintiffs are deprived of profits which they would otherwise make under said patent.

VIII. Defendant admits that plaintiffs heretofore brought suit under their patent aforesaid against the Sanitary Refrigerator Company, a Wisconsin corporation, located at the City of Fond du Lac, Wisconsin, and defendant admits that said suit was defended by the same counsel as are defending this suit, and that certain officers of the instant defendant testified in behalf of said Wisconsin defendant.

Defendant further avers that notwithstanding plaintiffs counsel cross-examined defendant's witnesses in said Wisconsin suit, there is no proof whatever in the records of said Wisconsin suit that said suit was defended by the Dent Hardware Company, and this defendant therefore denies the same, and leaves plaintiff to make full proof thereof.

Defendant admits that said Wisconsin suit was heard on the eighteenth and twenty-first days of February, 1927, during the absence of defendant's regular patent counsel; defendant admits that at the end of said hearing Judge Geiger rendered an opinion of one page making no reference to the claims of the patent here in suit, and making no reference to prior art patents in which opinion said Court mistakingly sustained said patent, and held that the refrigerator latches of the Sanitary Refrigerator Company were an infringement of said letters patent aforesaid, and that a decree of the usual form for plaintiffs was entered on February 24, 1927.

IX. Defendant further answering avers that it has taken and perfected an appeal from said decree to the Circuit Court of Appeals for the Seventh Circuit, and has filed a supersedeas bond in the sum of $5000 so that all proceedings in the District Court in Milwaukee are stayed pending the determination of said cause in the Circuit Court of Appeals for the Seventh Circuit.

X. Defendant admits that the Sanitary Refrigerator Company's latches were manufactured and sold by said Dent Hardware Company, and that the latter manufacture said latches in various sizes. Defendant denies that it has reduced prices which plaintiffs have had to meet to a greater or less extent and allege the contrary to be true; defendant denies that it has greatly and irreparably damaged plaintiffs by its infringement of said patent, denies that it has deprived plaintiffs of profits which would have otherwise been received, denies that it has secured great gains and profits which in equity belong to plaintiffs, and should be accounted for by said defendant and paid to plaintiffs.

Defendant denies that plaintiffs are without adequate remedy, save in a court of equity, where matters of this nature are properly cognizable.

Further answering, defendant avers that prior to the alleged invention of Alexander F. Winters and Basil R. Crampton, set forth in the letters patent sued upon, the said alleged invention had been patented or described in the following Letters Patent of the United States, and that, therefore, said letters patent sued upon are null and void, namely:

J. D. Simmons, No. 62,078, Feb. 12, 1867;
P. L. Maltbie, No. 310,900, Jan. 20, 1885;
J. A. Baldwin, No. 403,173, May 14, 1889;
H. F. Keil, No. 554,448, Feb. 11, 1896;
A. D. Fritts, No. 632,009, Aug. 29, 1899;
H. H. Dent, No. 670,506, Mch. 26, 1901;
A. Charles, No. 702,185, June 10, 1902;
J. A. Gregg, No. 871,269, Nov. 19, 1907;
P. C. Wiest, No. 934,253, Sept. 14, 1909;
E. Raaths, No. 1,022,872, Apr. 9, 1912;
T. O. Schrader, No. 1,114,296, Oct. 20, 1914;
T. O. Schrader, No. 1,117,709, Nov. 17, 1914;
T. O. Schrader, No. 1,170,685, Feb. 8, 1916;
A. D. Ward, No. 1,250,736, Dec. 18, 1917;
T. O. Schrader, No. 1,265,120, May 7, 1918.

XI. And, further answering, the defendant avers that prior to the alleged invention of the said Alexander F. Winters and Basil R. Crampton, in Latches, set forth in the letters patent sued upon—the said alleged invention was known to and used by the foregoing persons, at various places, and that therefore said letters patent are null and void.

XII. Defendant further avers on information and belief that the invention of said Winters and Crampton patent was known to and used by others in this and foreign countries, and is patented and described in other letters patent of this and other countries, the prior uses and names of which persons and the numbers and dates of which letters patent are at present unknown to defendant, but which when ascertained defendant prays leave to insert by amendment in its answer.

XIII. Defendant, further answering, avers that the Letters Patent No. 1,385,102 to Winters and Crampton, herein sued upon are null and void, because the subject matter therein set forth and claimed is not patentable under the laws of the United States in view of the state of the art relating to the manufacture and use of latches, and further avers that the subject matter of said patent involves no more than an ordinary expedient of good workmanship and mechanical skill, over prior constructions.

XIV. Defendant, further answering, avers that the claims of the letters patent sued upon cannot be construed to cover or include anything ever made, sold, or used by this defendant, and that they are invalid and ineffectual for such purpose, not only because of the cancellations of the declarations amounting to disclaimers, and of the express limitations and restrictions made or assented to by said patents in their ap-

plication for said letters patent, and moreover, made or assented to in consequence of rejections and objections by the Patent Office, which were acquiesced in by the applicants as a prerequisite to obtaining the allowance of their said letters patent as finally issued, all as disclosed by the file-wrapper of said letters patent, ready in court to be produced.

XV. Defendant further answering, and in conclusion, denies that it has ever at any time or at any place made, sold or used the alleged invention or substantial and material parts thereof described in the letters patent recited in the bill, and made the subject matter of the claims thereof when properly construed, and denies that it intends to do so.

All of which matters and things this defendant is ready and willing to aver, maintain, and prove, as this Honorable Court shall direct, and therefore prays that the bill of complaint herein may be dismissed with its reasonable costs, charges and disbursements in this behalf most wrongfully sustained, and to be taxed.

THE DENT HARDWARE COMPANY,
By H. H. DENT,
President.

HENRY P. NEWHARD,
Secretary.

E. HAYWARD FAIRBANKS,
Solicitor and Counsel for Defendant.

STATE OF PENNSYLVANIA,
COUNTY OF PHILADELPHIA, *ss.:*

H. H. DENT, being duly sworn according to law, deposes and says that he is president of the Dent Hardware Company, defendant herein; that he has read the foregoing answer by him subscribed, and knows the contents thereof, and that the facts therein set forth are true to the best of his information and belief.

Sworn to and subscribed before me this 22d day of April, 1927. } H. H. DENT, *Pres.*

NETTIE BUSSINGER,
(Seal) *Notary Public.*
Commission expires March 2, 1929.

PLAINTIFFS' STATEMENT OF EVIDENCE.

(Filed October 17, 1927.)

It was stipulated and agreed that printed copies of patents be received in evidence with the same force and effect as certified copies subject to any correction of errors. It was further stipulated that the Dent Hardware Company received notice of the patent in suit in the spring of the year 1925. It was stipulated that an exhibit heretofore filed in this cause marked "Plaintiffs' Exhibit C" is a correct representation of the structure manufactured by the defendant and is identical with the structure which was before Judge Geiger; and that the structure heretofore filed and marked "Plaintiffs' Exhibit B" correctly represents the structure of the plaintiffs' patent in suit.

Patent No. 1,385,102 issued July 19, 1921 was offered in evidence as Plaintiffs' Exhibit A. The exhibit marked "Plaintiffs' Exhibit B" the latch struc-

ture of the patent in suit, was offered in evidence as Plaintiffs' Exhibit B. The latch structure marked and identified as "Plaintiffs' Exhibit C," the defendant's latch structure, was offered in evidence as Plaintiffs' Exhibit C.

BASIL R. CRAMPTON, lives at Grand Rapids, Michigan; is engaged in the business of manufacturing refrigerator hardware and associated with Winters & Crampton Manufacturing Company. He owns 48 per cent. of the stock of that company. Mr. Winters owns 48 per cent. and Mr. Bouwkneckt owns the remainder.

He is the Basil R. Crampton who appears as one of the inventors in the Patent No. 1,385,102 for Latch issued July 19, 1921. Neither he nor Mr. Winters has sold any interest in this patent since its issuance.

He had sold latches to the Sanitary Refrigerator Company of Fond du Lac, Wisconsin, beginning in 1921 and sold the same until some time in 1925. The reason for not selling them after that time was that the Dent Hardware Company quoted a lower price on a similar article.

CROSS-EXAMINATION.

The particular latch that the Sanitary Refrigerator Company bought from the Dent Hardware Company was not a smaller latch than that sold by Winters & Crampton to the witness' recollection who had personal knowledge of the transaction and conducted it.

There are two general types of refrigerators, one known as commercial, a large box used in big butcher shops, and the other as household refrigerators. The testimony of the witness at Milwaukee shows that Winters & Crampton sold approximately 90 per cent. of

the commercial refrigerators with a latch covered by the patent in suit. There are about five or six refrigerator latch manufacturers in the country, some of which do not manufacture commercial hardware. Witness testified that he (his company) sold 90 per cent. of the commercial refrigerators their latches. The total of the latches of the type of the patent in suit sold in the year 1925 was about 400,000 and were identical with Exhibit C in the various sizes.

XQ. 28. You know, do you not, that practically every refrigerator latch that was ever used automatically locks when the door is shut?

A. Certainly not.

XQ. 29. The greater proportion of them do?

A. Not a great proportion, no.

XQ. 30. What proportion would you say?

A. Probably 50 per cent.; when this latch was brought out on the market practically 75 per cent. to 80 per cent. of the latches were non-automatic used on refrigerators.

They did not automatically lock when the door was slammed shut but locked by hand exertion. The Condit and Conroy were practically the only two that were being used when the type of lock of the patent in suit came into use. The witness had never heard of automatic refrigerator fasteners made by the Dent Hardware Company under the Dent patent prior to 1920, but had heard of the Conroy patent made by the Dent Hardware Manufacturing Company. At the time that the article of the patent in suit came on the market the majority of the locks made by the Dent Hardware Company did not automatically lock when the door slammed shut.

Winters & Crampton put out two latches or fasteners prior to the patent in suit, one of which was withdrawn from the market and of the other very little use is being made.

A certified copy of the decree of Judge Geiger in the suit brought by Alexander F. Winters and Basil R. Crampton on the Patent No. 1,385,102 in suit was offered in evidence as Plaintiffs' Exhibit D.

HARRY C. DENT, of Allentown, Pennsylvania, is a manufacturer of refrigerator hardware. He had heard of the suit brought by Winters & Crampton on patent No. 1,385,102 against the Sanitary Refrigerator Company of Fond du Lac, Wisconsin. The Dent Hardware Company undertook the defense of the suit; paid the bills; hired counsel; and directed the furtherance of the appeal to the Court of Appeals in the Seventh Circuit.

DEFENDANT'S EVIDENCE.

HARRY C. DENT is vice-president of the Dent Hardware Company, connected therewith about sixteen years as assistant sales manager, and also is in intimate touch with the manufacturing end. He is familiar in a general way with the mechanical end of the refrigerator latch business.

The fastener shown by the Dent patent granted in 1901, No. 670,546, and like the specimen which is offered in evidence as Defendant's Exhibit No. 1, has been manufactured by the Dent Hardware Company since 1901, used very extensively since that time and still enjoys a large sale. Since the patent was issued millions of them have been manufactured.

Q. 11. When that latch stands horizontally, and you slam the door, is the door automatically locked?

A. That is the end of it.

Q. 12. If this latch lever stands vertically, and you slam the door, will the door automatically lock?

A. Yes, sir.

THE COURT: Apparently there is a difference in the principle of operation.

MR. FAIRBANKS: There is a mechanical difference, yes, Judge; yes, indeed; I agree with that.

THE COURT: One seems to be a cam operation and the other a gravity operation.

MR. FAIRBANKS: In a way, yes, sir.

The witness looked at the Keil Patent No. 554,448 granted in 1896 and stated that it had been on the market and is still on the market today. Asked about the numbers manufactured, he could not state how many, because the Dent Hardware Company was not the manufacturer, but would say that it enjoyed a wide sale at one time. He further stated that specimen of the Keil patent mounted on a door would automatically lock whether it was in a horizontal position or a vertical position.

The Dent Patent No. 670,506 was offered in evidence as "Defendant's Exhibit No. 2."

The specimen of the Keil patent was offered in evidence as "Defendant's Exhibit No. 3."

The patent to Keil No. 554,448 was offered in evidence as "Defendant's Exhibit No. 4."

The following patents to T. O. Schraeder, No. 1,114,296, granted October 20, 1914, marked "Defendant's Exhibit No. 5"; No. 1,117,709, granted November 17, 1914, marked "Defendant's Exhibit No. 6"; No. 1,170,685, granted February 8, 1916, marked "Defendant's Exhibit No. 7"; and No. 1,265,120, granted May 7, 1918, and marked "Defendant's Exhibit No. 8," were shown the witness and he was asked whether or not the structures in

such patents had been manufactured by the Dent Hardware Company heretofore and approximately to what extent.

The question was objected to as wholly immaterial to the issue in this cause. Witness answered that No. 1,114,296 is one of the fasteners which they are manufacturing today and substantially the same form as shown by the patent being manufactured to the extent of 100,000 per year. No. 1,117,709 was made by the Dent Hardware Company after 1914, which manufactured many thousands of them in three years. No. 1,170,685 has been manufactured since the patent was issued, and this fastener on the market for two or three years was sold in goodly quantities. No. 1,265,120 was manufactured by the Dent Hardware Company in considerable quantities and is still used to some extent. The Schraeder patents referred to were offered in evidence as Defendant's Exhibits 5, 6, 7 and 8, respectively, and objected to as wholly immaterial. Mr. T. O. Schraeder lives in Allentown, Pennsylvania.

The witness would say that several millions of fasteners had been manufactured under the four Schraeder patents and that they now get repeat orders for this same type of fastener.

The device complained of in the suit shown by the Schraeder Patent No. 1,575,647, granted March 9, 1926, has been made by the Dent Hardware Company to the extent of at least 100,000 and there are now orders on hand for future delivery of this type of latch.

The Schraeder patent last above referred to was offered in evidence as "Defendant's Exhibit No. 9."

Q. 26. After this patent we are now talking about was issued to your corporation, on March 9th, 1926, did your company go into the manufacture of this latch

in good faith and under the advice of counsel, thinking you had a right to make it?

MR. LIVERANCE: Objected to as wholly improper, irrelevant and immaterial. The issuance of this patent to the Dent Hardware Company gave no right to manufacture anything, if they were previously infringing an earlier issue patent. It gave them a right to exclude others from manufacturing what is covered by the Schraeder patent, but does not give a right to manufacture. There is no provision in the patent laws that permits anything like that; and, the decisions of the Courts, excepting a few mistaken decisions of earlier years, are in accord against any principle which tries to intimate that the issuance of a patent to anyone gives them a right to manufacture.

By MR. FAIRBANKS:

Q. 27. I now show you lines 57 to 74, on page 2 of your Patent No. 1,575,647, which I will ask you to read to the reporter, for the record.

A. "I am aware of Patent No. 1,385,102 dated July 19, 1921, and I disclaim the structure therein disclosed, as my invention is differentiated therefrom, since whereas the structure disclosed, in said patent utilizes a pin 12 carried by the latch arm 11, which co-acts with an upper cam edge 18 of the keeper member 17; in my novel construction the upper edge of my keeper plate B-3 has no function, but the pivotal latch C-6, carries a cam C-1 inclined to the pivot of said latch and adapted to co-act with a pin B-8 carried by and laterally projecting from, the inner wall of the keeper plate B-3 thereby to swing the terminal tongue of the latch into the horizontal locking position; and to none of the constructions of the prior art do I herein make claim."

MR. LIVERANCE: It is moved that the matter just read by the witness be stricken from the record. The patent speaks for itself. This portion read is wholly immaterial to the issues in this cause, which are concerned not with what Schraeder did not invent, but with what Winters & Crampton did invent, and what it covers. Also, it is believed that it is contrary to the rule of the Federal Court to read matters from publications into the record.

By MR. FAIRBANKS:

Q. 28. Have you any recollection of about the time this patent was granted which we are now talking about, which was in the month of March of last year, my writing to your corporation and calling your attention to the matter you have just quoted?

MR. LIVERANCE: In order to lessen the record and to avoid interminable objections to questions of this nature, or relating to the Schraeder Patent No. 1,575,647, counsel for the plaintiff, with the consent of counsel for defendant, will enter a general objection to anything of that kind, on the ground that it is wholly immaterial, in accordance with the decision in Herman v. Youngstown Car Manufacturing Company, 191 Federal, at page 579, in which volume, on pages 584 and 585, the immateriality of the issuance of a patent to a defendant as relating to the question of an infringement is completely and concisely set forth; and, this general objection is to apply to all questions relating to this patent.

MR. FAIRBANKS: I shall make my reply to Mr. Liverance later, in the defendant's brief. But, I desire to point out that there are numerous decisions in the Federal Supreme Court, District

Courts, and Courts of Appeal which show that the granting of a patent to the defendant raises a clear presumption that there are physical, structural differences which in many cases has turned the scale on the item of infringement.

By MR. FAIRBANKS:

Q. 29. Do you remember getting a letter from me——

A. I don't remember it.

Q. 30. Anyhow, in view of your patent protection, your corporation has proceeded in good faith, and under the advice of counsel, in the manufacture of these latches here complained of?

A. We did.

The witness was present during Mr. Crampton's testimony and heard it and heard him say that 90 per cent. of the commercial refrigerator manufacturers were equipped with latches or fasteners like the patent in suit and to the best of his knowledge and belief the statement is incorrect. The witness travels throughout the United States and is familiar in a general way with what the principal manufacturers of commercial refrigerators are using in the way of fasteners and he would say that 50 per cent. would be more nearly right as to the commercial refrigerators using plaintiffs' latch, Exhibit B.

The witness stated that of commercial refrigerator manufacturers there are between twenty-six and thirty, possibly thirty, and as to household refrigerator manufacturers approximately thirty-three, making a total for both of sixty-three.

Q. 40. I show you a transcript of Mr. Crampton's deposition in Milwaukee, on or about February 18th, 1927, which you have seen before, and ask you to run through Mr. Crampton's testimony briefly, and to state

to the Court any inconsistencies or incorrect statements therein which you find.

A. On page 4, in answer to the question: "To what extent is the latch shown by the patent in question used by refrigerator companies?" The answer is: "On commercial refrigerators, groceries and hotels and butcher-shops, about 90 per cent. use this principle." I would say that that statement is incorrect, to the best of my knowledge.

On page 5 is this question: "What percentage of those commercial refrigerators does your company sell?" The answer there is: "All, except about two or three." I would say, to the best of my knowledge and belief, that that statement is incorrect.

On the same page appears this question: "Do you sell this latch to any household refrigerator companies? The answer is: "Yes." Next question: "What companies?" Answer: "Sanitary Refrigerator Company, we did; the Illinois Refrigerator Company; the Bowen Refrigerator Company; the Arlington Refrigerator Company and the Tennessee Furniture Corporation." The statement with reference to the Tennessee Furniture Corporation is incorrect.

On page 8, under cross-examination, appears this question: "With reference to your statement that 90 per cent. of the commercial refrigerators use your latch, you don't mean to state they use only that latch, that they are purchasers from your company?" Answer: "I meant 90 per cent. of the volume of hardware used on commercial refrigerators was our latch." I would say that that statement is incorrect.

The witness would say that Mr. Crampton's testimony in Milwaukee that all but two or three manufacturers of commercial refrigerators were using the latch of his patent was incorrect. And stated that of the commercial refrigerators and household refrigerator

manufacturers thirty-three were customers of the Dent Hardware Company.

The Dent Hardware Company was organized in 1894 and witness would say that it was one of the largest manufacturers of refrigerator hardware. The witness knew that Winters & Crampton had two latches on the market prior to 1921 which are not on the market today.

A specimen of the Charles Patent No. 702,185 was offered in evidence as "Defendant's Exhibit No. 10," and the Charles Patent No. 702,185, granted June 10, 1902, was offered in evidence as "Defendant's Exhibit No. 11," both being shown the witness who stated that the specimen conformed to the drawing in the patent.

Q. 47. Will you also please state whether or not the latch member of that Exhibit 10 which you have in your hand, will automatically lock when standing horizontally or vertically?

A. It will.

Q. 48. I ask you the same question in regard to your father's early fastener, of 1901, and the fastener of the Keil Exhibit No. 3; will the latch levers of those two structures lock automatically when standing in a vertical or horizontal position?

A. They will.

Witness named the manufacturers of refrigerator latches or fasteners in their order of their importance as Grand Rapids Brass Company, Dent Hardware Company, Winters & Crampton, Artistic Bronze Company, Arcade Manufacturing Company and Keeler Brass Company. Witness said he had earlier stated that in a general way plaintiffs' business under the plaintiffs' patent in suit was 50 per cent. of the total business in commercial refrigerators but now thinks that such statement as to 50 per cent. is high and he would be more inclined to say that 30 per cent. would be more nearly correct. And that the claim of Win-

ters & Crampton that they were furnishing 90 per cent. of all the fasteners used on commercial fixtures was to the best of his knowledge incorrect. He further said that they did not cut prices in the case of Sanitary Refrigerator Company but what they actually did was furnish a smaller fastener at less money. That they are well-known, a long established house and have well established prices for all this merchandise.

CROSS-EXAMINATION.

The Dent Hardware Company sold latches like those illustrated in the Schraeder Patent No. 1,575,647 before the date of the issue of the patent on March 9, 1926. They had applied for a patent and witness understood that having made application for patent it was permissible to manufacture the article. It was his understanding of the patent law that applying for a patent gave a right to manufacture.

By order of importance in the list of latch manufacturers given by him he meant the importance of size or importance of the volume of business that they transact.

XQ. 62. Total business, whether they made latches for refrigerators and other goods?

A. I would say principally fasteners, because that is a big business.

XQ. 63. In the order of importance of refrigerator latch manufacturers alone, do not Winters & Crampton make as many refrigerator fasteners as all the rest combined?

A. They do not.

XQ. 64. What is the total latch business of the country over, for refrigerator latches—how many latches?

A. I haven't the figures available.

XQ. 65. About two and a half millions?

A. I don't know.

XQ. 66. You don't know how many Winters & Crampton made?

A. I haven't the data available now, as to what Winters & Crampton are doing.

XQ. 67. Then, your answers this morning, have been guesses?

A. No.

XQ. 68. You don't know how much Winters & Crampton make?

A. No.

XQ. 69. And you don't know the total volume of latch business over the country?

A. I can give you the exact figures, but not now.

XQ. 70. You can tell me, approximately, whether two and a half million latches for refrigerators is about right, can you not?

A. Why, I would say that probably more than two and a half million latches were used on refrigerators in this country, in the course of a year, for all purposes.

XQ. 71. Household and commercial refrigerators?

A. Yes.

XQ. 72. How many more?

A. Well, I should think about three and a half millions.

Witness did not have available the figures of latches made by the Dent Hardware Company for refrigerators for last year but can say they made considerably more than three hundred thousand also would say that they made nearly 100,000 of the Dent structure like Defendant's Exhibit No. 1 for commercial and domestic refrigerators sold to the Herrick Refrigerator Company of Waterloo, Iowa.

XQ. 79. How long would the refrigerator latch of Defendant's Exhibit No. 1 hold a tight pivot after it was in use?

A. Well, it might stay there for a very long time; it is riveted tight.

XQ. 80. After a dozen blows of the door in closing, it would loosen that pivot so it would drop down almost to a vertical position, wouldn't it?

A. It might or it might not.

XQ. 81. Isn't that the actual practice, in the case of refrigerators equipped with this latch, Defendant's Exhibit No. 1?

A. When the door is closed, the handle is down, yes.

XQ. 82. What I mean is, that within a week, or after this handle has been operated and the door opened and closed a dozen or two dozen times, the pivot becomes so loose that the handle always remains down when the door is open?

A. Well, I have seen it a great many times with the handle staying up.

XQ. 83. You call this latch the Dent latch?

A. I call it the Standard Fastener; it is manufactured by the Dent Hardware Company.

XQ. 84. It has been called the Dent latch, in years past, has it not?

A. It has not.

XQ. 85. Did you ever hear it called the Conroy latch?

A. Never did.

XQ. 86. Did you ever hear of the Conroy patent?

A. Yes.

XQ. 87. Issued in 1885?

A. I don't know when it was issued.

XQ. 88. The Conroy patent is identical with this structure, is it not?

A. No.

XQ. 89. What is the difference?

A. The Conroy patent had the handle riveted between two lugs, with a round pin. The pin feature of

the standard fastener was that the handle instead of having a round hole drilled through it had a hole like this (illustrating), slotted so that when the fastener closed, the cam part rested on the plate of that part of the fastener holding the handle. That was the feature that the Conroy did not incorporate.

XQ. 90. What is the difference in the principle and operation of this and the Conroy structure?

A. Well, the principle reason for making the fastener as I have described was to take the strain off of the pin when the fastener was closed.

XQ. 91. There was no difference in principle of operation, however?

A. I don't know of any particular difference. There may have been other minor differences.

MR. LIVERANCE: Plaintiff offers in evidence Conroy Patent No. 332,495, issued December 15th, 1885, as Plaintiffs' Exhibit "E."

Witness testified that he knew the Tennessee Furniture Corporation does not use spring lever locks like Winters & Crampton patent in suit because of a letter addressed to the Dent Hardware Company stating the different kinds of fasteners they had used during the past year and had no other evidence except their statement of what they were doing.

The testimony of the witness respecting the Tennessee Furniture Corporation heretofore given was objected to as being purely hearsay. He did not know other than what the letter stated that the Tennessee Furniture Corporation does not buy latches like those made in accordance with the plaintiffs' patent from Winters & Crampton today. He does not know how many latches the Grand Rapids Refrigerator Company now called the Leonard Refrigerator Company uses in a year. He would say that Winters & Crampton sold

latches to Grand Rapids Refrigerator Company but does not know that it furnished them with if not their entire requirement almost their total supply. He cannot answer the question.

XQ. 99. If the Leonard Refrigerator Company used 700,000 latches in 1925, bought from Winters & Crampton, is not that more than double the output of latches you made during that year?

A. I would say, no.

Witness cannot give the exact figure of how many refrigerator latches were made by his company during 1925, not even approximately without given data.

He travels west of the Mississippi River, but not farther than St. Louis. He knows the Omaha Fixture & Supply Company as small manufacturers and the Viking Refrigerator Company he would not consider a large manufacturer and the Koch Butchers Supply Company of Kansas City he would not consider a small manufacturer. The Hoffman Refrigerator Company is a large manufacturer.

XQ. 111. How many latches do you sell to the commercial refrigerator manufacturers outside of the Legonier Corporation and C. V. Hill?

A. I haven't those figures available, to give you.

Witness said that the Dent Hardware Company sold both Legonier and Hill.

XQ. 114. Why do you make refrigerator latches like Exhibit "C," when you say there are so many other refrigerator latches that can be used in place of it?

A. Why, because we had a call for a latch of that type.

XQ. 115. Did you ever call on the Hussman Refrigerator Company in St. Louis—Mr. Hussman himself—trying to sell them refrigerator latches or locks like Plaintiffs' Exhibit C, except larger in size?

A. Yes.

XQ. 116. Did you quote them a price considerably under Winters & Crampton's prices?

A. I didn't know what Winters & Crampton's price was, so far as the latches Mr. Hussman was using, are concerned. Our prices were based on our cost, plus a reasonable margin of profit.

XQ. 117. You don't know whether it was under Winters & Crampton's price?

A. I do not.

XQ. 118. You don't know whether or not your price to the Sanitary Refrigerator Company was under that of Winters & Crampton's?

A. Well, the only way I can tell that is by the statement that was made by the opposition, to the effect that we cut our prices.

XQ. 119. Let me see if I get your position right, you considered and have been advised, that an application for a patent, or the issuance of the patent, gives to you a right to manufacture the goods which are shown by said application or patent; is that correct?

A. I make that statement because of the reason that I have seen, time and time again, articles placed on the market that were simply marked "patent applied for." I, therefore, took it that they were within their rights in going ahead and making the article after applying for a patent.

XQ. 120. You are not a patent attorney?

A. No.

XQ. 121. And do not understand the question of infringement?

A. I should say, no.

XQ. 122. Do you know the volume of commercial refrigerator latches made and sold in the United States —the approximate figures—can you give the approximate figures as to such volume?

A. I cannot.

PLAINTIFFS' REBUTTAL EVIDENCE.

BASIL R. CRAMPTON stated that they first began manufacturing refrigerator latches like the patent in suit and as shown in Plaintiffs' Exhibit B in the early part of 1921. He gave as an approximate estimate of the number of latches in all sizes made since in accordance with such patent and exhibit as about two and one-half million. The witness stated that he had heard of the Condit latch and that it was very much in production and being used when the latch of the patent in suit came on the market. Its operation is different from plaintiffs' latch, the Condit latch being pivotally mounted on the door casing and swung across the meeting edges of the door and door casing and across a cam on the door. With the Condit latch with the latch mounted on the door casing if it drops to horizontal position when the door is opened, the door would not close but would strike against the end of the lever. This would not happen in the latch of the patent in suit. Witness gave his estimate of the total number of refrigerator latches, household and commercial, which were made each year at about two and one-half millions, of which Winters & Crampton made a little under one million eight hundred thousand last year and four hundred thousand in accordance with the patent in suit.

Q. 15. Upon what, do you base your estimate of 90 per cent., or approximately 90 per cent. of the volume of commercial refrigerator latches made up in accordance with the structure and principle of your patent in suit?

A. For the amount of business we do, and deducting that from the other types that are used.

Q. 16. Do you consider the Legonier Corporation and C. V. Hill latch as made in accordance with the principles of your patent in suit?

A. I do.

There is one latch manufacturer of commercial refrigerators, the McCray Refrigerator Company, that has used the Condit latch, but witness has been informed by this company that they are going to discontinue the Condit latch but have not decided as to the type of latch they will use. The witness personally has submitted samples of his own latch to the McCray Company for this new departure and has submitted a latch like the one covered by the patent in suit. The McCray Company says there are too many other companies using these latches and do not want to imitate their competitors.

Winters & Crampton right now sell latches like the patent in suit to the Tennessee Furniture Corporation. Not as many as they used to, but they still have some orders from them. Their other latches, not in accordance with the patent in suit, are furnished, most of them, to the extent of 95 per cent. by Winters & Crampton.

The witness produced and read from a catalog of Winters & Crampton names of commercial refrigerator manufacturers to whom Winters & Crampton sell latches of the patent in suit. This list appears on page 21 of the catalog and gives the places where the companies are located. The catalog was offered in evidence as "Plaintiff's Exhibit F."

Winters & Crampton sold the Leonard Refrigerator Company from July, 1925, to July, 1926, about 700,000 latches. The Winters & Crampton Company are the largest manufacturers of refrigerator hardware in volume of refrigerator latches and make nothing else except a little kitchen cabinet hardware. The Grand Rapids Brass Company makes other things besides refrigerator hardware, so does the Dent Hardware and the Keeler Company.

The Winters & Crampton Company started to manufacture hardware in the early part of 1918 and has reached its present position since that time.

Attention being called to the latch, Defendant's Exhibit No. 1, the witness stated that the name that he had always known this latch was by that of the Conroy fastener.

Q. 41. I ask you how long a latch, even if riveted as tightly as that, would remain tightly riveted in service?

A. Depending how many times it was slammed in a day, and how hard. Under usage, such as in a grocery store, perhaps two or three days.

Q. 42. In that case, the latch lever, when the door was open, would always remain vertical?

A. It would.

Witness testified that this is the way it normally operates and after the door is closed a push is applied to the latch handle to wedge it tightly closed.

Attention being called to the latch, Defendant's Exhibit No. 3, witness stated that the latch did not stand at a horizontal unless it was riveted tight and if so riveted it would hold for about two or three dozen slams of the door if slammed hard enough.

Q. 47. I call your attention to a certain exhibit, which is substantially identical with Defendant's Exhibit No. 1, and ask you to look at that latch and state whether or not that is the normal operation of the so-called Conroy latch, or so-called Dent latch, as it has been previously called?

A. Yes.

Some discussion between Mr. Fairbanks and Mr. Liverance took place as to when this exhibit was first produced and what patent it was made under and it was agreed that this last exhibit had been on the market twenty years and Mr. Liver-

ance thought it had been on the market since 1885 when Conroy first produced latches of that type. This latch mounted on the door was offered in evidence as "Plaintiffs' Exhibit B."

CROSS-EXAMINATION.

By MR. FAIRBANKS:

XQ. 48. Mr. Crampton on the eighteenth day of February, exactly three months ago to the day, you swore, in Milwaukee, that at that time you had made about 2,000,000 latches embodying the principles you brought out in the patent in suit, is that correct?

A. Yes.

XQ. 49. You told us today, three months later, that you put out a year two and a half millions. Do you mean to tell the Court that you made and sold a half million of these latches in three months?

A. I didn't make any such statement.

XQ. 50. Then, I did not hear your statement correctly?

A. Probably you did not.

XQ. 51. What did you mean when you said you made two and a half million latches, what latches were they?

A. He asked me how many we had made, of this type, since we started, and I said a little over two million.

XQ. 52. Tell us, now, Mr. Crampton, what the exact facts are. In Milwaukee, you swore, on February 18th, that you had made 2,000,000 latches of the patent in suit?

A. Yes.

XQ. 53. This afternoon you swore that you had, up to date, made two million and a half. If you didn't say that, please tell us what the exact facts are?

A. The question asked me was how many refrigerator latches were made or used in the country a year, and I said two and a half million, since we started manufacturing.

XQ. 54. In Milwaukee, on February 18th, when you swore that you had made 2,000,000 latches, were those latches exactly like Plaintiffs' Exhibit B?

A. Yes, since we have started.

XQ. 55. Today, if I get your testimony straight, you swore that up to today, you made two and a half million of these latches?

A. No.

XQ. 56. That is not right?

A. I didn't say anything like that.

XQ. 57. Tell us what you meant to say. I want to help get the thing straight?

A. It is all right.

XQ. 58. What were you talking about when you said you made two and a half million latches to date?

A. The question asked me was, how many refrigerator latches were made per year. I said, about two and a half million. That was followed by another question as to how many we made last year, and I said slightly under one million eight hundred thousand, last year.

XQ. 59. How many of these latches like Exhibit B, have you made between February 18th, and May 18th, to date, about?

A. One hundred thousand.

XQ. 60. At the time you testified, on February 18th, before Judge Geiger, in Milwaukee, as to these 2,000,000 fasteners had you gone over your books, personally, and accurately counted every one of those 2,000,000 latches, or were you just guessing at it?

MR. LIVERANCE: That is objected to. Mr. Crampton testified in Milwaukee as to the approxi-

mate number of latches which they had made, as in round numbers, 2,000,000. It might have been 2,000,000 or considerably more, or a few less. That was not put in as the exact number of latches made. I wish this on the record, so that the Court might understand on what basis Mr. Crampton answered the question in Milwaukee.

By Mr. Fairbanks:

XQ. 61. Please answer the question.

A. We went over our books and checked up.

XQ. 62. Did you do it, personally?

A. With our bookkeeper, yes.

XQ. 63. You did it, personally, did you?

A. With our bookkeeper.

XQ. 64. I am not talking about the bookkeeper. Did you do it, personally?

A. That would be personal, two of us.

XQ. 65. You did not do it personally?

A. No, not alone, no.

XQ. 66. All you know is what somebody told you——

A. No.

XQ. 67. What do you mean?

A. I examined the books, myself.

XQ. 68. You counted them up, checked them up, those 2,000,000?

A. I did, along with him.

XQ. 69. How long did it take you?

A. About two days.

XQ. 70. You checked up 2,000,000 in two days?

A. Yes.

XQ. 71. Did you do the checking, or did the bookkeeper do it?

A. He read them off to me from the books, and we checked them back.

XQ. 72. How were they identified on the books?

A. By date and numbers.

XQ. 73. What was the particular number of those under this patent in suit?

A. 400.

XQ. 74. Will you please produce true and correct copies of your records, so that I can check those up for myself, as to the number of 400?

MR. LIVERANCE: That is objected to as being entirely unreasonable. We are willing to produce the compilation taken from the books, which is hereby offered in evidence as Plaintiffs' Exhibit "H," showing the latches for the years 1921 to 1926, inclusive, the grand total of which is 2,095,746.

MR. FAIRBANKS: That is objected to as immaterial, irrelevant and incompetent. It is simply hearsay, or secondary evidence. It has not been identified by anyone as being a true and correct transcript from the plaintiffs' books, but, apparently, something gotten up by a bookkeeper or some outsider. It has not been sworn to in this cause.

MR. LIVERANCE: Proper identification of the exhibit will be made later.

By MR. FAIRBANKS:

XQ. 75. The latch conforming to the drawings of your patent in suit, Plaintiffs' Exhibit "B," is No. 400?

A. Yes.

XQ. 76. And, according to your own figures, here they only total up to 1,001,113; is that right?

A. Of that one size. There are eleven sizes.

XQ. 77. You just told me that this latch was No. 400?

A. That is the particular number of that latch, yes.

XQ. 78. You make them in seven or eight different sizes?

A. Eleven different sizes.

MR. FAIRBANKS: I renew my objection to the offer of the last exhibit. There is no proof of its authenticity; merely what the bookkeeper or somebody else told the witness.

MR. LIVERANCE: The testimony is that he and the bookkeeper, personally, compiled this list, not somebody else?

THE WITNESS: Yes.

Asked about the list of customers on page 21 of the catalog attention was called to the legend at the top of this list: "A Partial List of Refrigerator Manufacturers Using Our Locks and Hinges" and witness was asked to segregate from the list read off the parties who bought hinges and the parties who bought latches. He answered that the list he read was commercial refrigerator manufacturers to whom Winters & Crampton do not sell hinges as Winters & Crampton do not manufacture hinges for commercial refrigerators.

XQ. 79. Then, the legend at the top of this list here is very misleading, where you say: "Refrigerator Manufacturers Using Our Locks and Hinges."

A. There is nothing confusing about it at all. There is a list of household refrigerator manufacturers printed directly underneath that, who use both our locks and hinges.

Witness said that they did not sell any hinges whatever to commercial refrigerator manufacturers because they do not manufacture a heavy type of hinge.

With the exception of the illustration on page 16 of the catalog all of the latches illustrated on pages 9 to 17 are of the type known as the "trip lock fast-

eners." Of the list of commercial refrigerator concerns two purchase the "trip lock fastener," the Piggly Wiggly Company and the Herrick Company. All the rest purchase the fastener like the one in suit and the Piggly Wiggly purchase both types, the trip lock and the one like Exhibit B.

The witness estimated that the total number of fasteners for refrigerators made during the last year was approximately two and one-half million, of which Winters & Crampton made a little under 1,800,000, leaving 700,000 fasteners for the other five concerns to manufacture. Asked if he did not know the defendant's company alone made over one million fasteners a year, the witness stated that he did not believe that the Dent Hardware Company made one million fasteners for refrigerators in 1926. Asked how the other five concerns live on the remaining volume of business, it was answered that they manufacture other products and that is how they live.

XQ. 99. What authentic, accurate data have you for this figure of 2,500,000 fasteners, made in the year 1926?

A. From experience and long connection with the refrigerator industry that I have had.

He had been connected with the refrigerator industry before going into the manufacture of refrigerator hardware in 1918, and refrigerator manufacturers have never hesitated in advising the witness as to the approximate amount of refrigerator fasteners they use annually. He did not take his estimate from any authentic books but only has the word of the refrigerator manufacturers.

(Objection was made by counsel for the defendant to all the previous answers as to the estimate of two and one-half million refrigerator fasteners as being incompetent, irrelevant and immaterial—secondary evidence.

Of the 1,800,000 refrigerator fasteners made in 1926 400,000 were of the type shown by Exhibit B in the different sizes and the remainder of the spring trip latch. Witness relied on the books and records of the Winters & Crampton Company for this information which he checked up himself personally with the help of the bookkeeper.)

XQ. 111. Did the bookkeeper help you?

A. He did.

XQ. 112. You didn't personally count those up, did you?

A. No.

XQ. 113. You took the word of the bookkeeper, did you not?

A. No.

XQ. 114. You did it yourself, personally?

A. Personally, with the bookkeeper.

XQ. 115. Anyhow, all you know about these two and a half million is simply what other manufacturers told you; is that right?

A. No. If we made a little under 1,800,000 latches in 1926, there is good evidence that there must be two and a half million refrigerator latches made in 1926.

XQ. 116. Please answer the question.

A. No; that is not the only information.

XQ. 117. What was your other source of information?

A. I just gave you that answer.

XQ. 118. Answer it again, please; what other source besides what other manufacturers told you?

A. If we made 1,800,000 refrigerator latches in 1926, that is evidence that there must be two and a half million latches made annually, or in 1926.

XQ. 119. We do not agree with you at all. I am talking about the total of two and a half million. As I understand, all you know about it is that you made

so many, and some other people told you how many they made, is that right?

A. Yes, refrigerator manufacturers that we did not obtain their business, informed me of their approximate requirements which, added to the amount of business we obtained in 1926 aggregated around two and a half millions.

XQ. 120. That is, from what somebody told you, you figured it to be about two and a half millions?

A. I have every reason to believe the refrigerator manufacturers told me the truth.

XQ. 121. Answer the question.

A. Other than that, I have no evidence.

XQ. 122. All you know about this is the difference between what you made and what you are guessing at, what some other people told you; isn't that so?

MR. LIVERANCE: The intent is to get a "yes" or "no" answer to the question. This witness explained how he obtained his information and, necessarily, must do so in order to give a truthful answer, one which is not only the truth, but the whole truth; and, it is submitted that his answer to the question has been correct.

THE WITNESS: Yes.

By MR. FAIRBANKS:

XQ. 123. Four or five other manufacturers besides yourself made up this balance of 700,000 latches, which is the difference between what you say is your output and the two and a half millions. Please give the names of the other manufacturers.

A. Mr. Dent gave the correct names of the manufacturers, I can repeat them.

XQ. 124. I wish you would, setting beside each name, how many latches or fasteners they made.

A. The Dent Hardware Company, Grand Rapids Brass Company.

XQ. 125. How many did each of those concerns make?

A. You are asking me something—do you want that list now.

XQ. 126. I want opposite each name the number of latches they made.

A. I cannot give you that list, what each one made.

XQ. 127. I want to know how you make up the difference of 700,000?

A. I explained it to you about seven times.

XQ. 128. No, you haven't explained it at all. Please give the names of each manufacturer, and in addition, the number of latches they made. I want to see how you get the figure of 700,000, can you do it?

A. Taking it as a whole, I can, but not separately.

XQ. 129. I want it separately.

A. You will have to get it from them.

XQ. 130. Then, you just guessed at it, didn't you?

A. No, no guess work.

XQ. 131. Just give the best guess as to the four or five other concerns—as to what they made—so that we can find out how you make up the total of 700,000. Do the best you can. If you can do it, please do so.

MR. LIVERANCE: This is further objected to as entirely improper, immaterial and irrelevant, and I ask that it be stricken from the record.

THE WITNESS: Dent, I would say, made last year, approximately 250,000 refrigerator locks.

XQ. 132. Who, Dent?

A. Yes, Dent. I have no actual proof, but got this information from refrigerator manufacturers themselves.

Grand Rapids Brass Company, probably 350,000.
Keeler Company, probably 50,000.
The Arcade Company 50,000.

I would like to change the Grand Rapids Brass to about 250,000.

The Artistic Company 25,000.

There are two Artistic Bronze Companies, you know.

The National Lock Company perhaps made 75,000 refrigerator latches.

XQ. 133. You give the Dent Hardware Company, the defendant, credit for a quarter of a million fasteners for the year 1926?

A. Yes.

XQ. 134. Suppose I should tell you that you were three-quarters of a million or 750,000 fasteners out of the way; would that alter your views any?

A. I do not believe they made that many for refrigerators. They might have made that many including their other hardware products, tobacco cases, but not for domestic or commercial refrigerators.

XQ. 135. As a matter of fact, you know nothing whatever about what the Dent Company's output was, except what somebody told you?

A. What the refrigerator manufacturers told me, yes.

XQ. 136. What somebody told you?

A. What the refrigerator companies told me, not what "somebody."

RE-DIRECT EXAMINATION.

The witness stated that the compilation shown by plaintiffs' Exhibit H was made in the early part of February, this year. The bookkeeper's name he worked with was Harvey Bouwkneckt. The figures were taken from the regular books kept in the course of business. They were compiled just prior to the trial of the Sanitary suit. The figures were read off by both the wit-

ness and the bookkeeper who alternated and took turns at it.

RDQ. 145. When you say our "400 line," what does that mean?

A. It means the 400 line, made in several sizes, such as 401, 405, 410, 415 and 420.

RDQ. 146. Does the catalog which has been introduced in evidence as Plaintiffs' Exhibit "F," show the different sizes with the numbers going with them?

A. It does.

RDQ. 147. In whose handwriting are these figures?

A. Mr. Bouwkneckt's.

RDQ. 148. Did he make the pencil notations at the end, also?

A. No, sir; I did that.

RE-CROSS-EXAMINATION.

RXQ. 149. Your catalogue, Exhibit F, is not entirely complete, is it? It does not show quite all of your items?

A. Not quite all of the items in it.

RXQ. 150. Which numbers on this Schedule H are missing from this catalogue?

A. 401, 375, 387 and 385.

RXQ. 151. What documentary evidence have you to link up numbers 401, 375, 387 and 385 with the latch of the patent in suit?

A. It is identically the same structure, except made up in odd sizes which we do not care to submit to the trade.

RXQ. 152. Please answer the question.

A. Samples in our factory.

RXQ. 153. You have not answered the question yet?

A. I have no documentary evidence here.

RXQ. 154. Where is it?
A. At the factory.

MR. LIVERANCE: The question and answer are objected to as improper. The witness is testifying from recollection, remembrance, and such recollection, remembrance is substantiated by his continuous connection actively with the business, and his knowledge of the numbers which they make and sell. Documentary evidence does not exist with respect to these numbers, but the witness, from his own knowledge, testifies to such numbers and testifies that he knows that they are of the 400 line in accordance with the patent in suit; and it is admitted that the cross-examination should be as to the witness' personal knowledge, what he knows, himself.

MR. FAIRBANKS: In view of the witness' last answer, that he has no documentary evidence here to substantiate his statement that the latch numbers 401, 375, 387 and 385 are linked up with the patent in suit, I renew my objection to any consideration of this paper, Plaintiffs' Exhibit H. No further questions.

HARRY C. DENT, recalled, testified that he was present and heard the testimony of Mr. Crampton wherein he gave his estimate for the fiscal year ending in 1926 for the Dent Company as 250,000 refrigerator latches. The witness stated that he had testified previously that the Dent Company made approximately one million fasteners, but he finds, however, upon checking up their records since that time that the Dent Hardware Company sold 685,683 latches, these consisting of 186,476 latches of the so-called spring type and 499,307 of other types such as the Dent latch. This amount of latches

sold is two to three times as much as Mr. Crampton estimated the Dent Hardware Company manufactured. Following Mr. Crampton's figures of having made 1,800,000 latches out of the total of two and one-half million which Mr. Crampton said were manufactured during 1926, this would leave practically no fasteners to be manufactured by other larger concerns during that period.

It was pointed out by counsel for plaintiffs that Mr. Crampton testified that his company made 1,800,000 latches for refrigerators and it was his estimate that the Dent Hardware Company made 250,000 fasteners for refrigerators at the same time conceding that the Dent Hardware Company made fasteners for soda fountain doors, tobacco humidors as well as other articles which Winters & Crampton do not attempt to supply.

Q. 3. Having reference, now, to Mr. Crampton's testimony in general, as to the volume of his business as compared with the business of other manufacturers, have you any figures or facts which go to show any inconsistencies or discrepancies in his testimony; if so, will you please state them?

A. In going over the record, I find that Mr. Crampton testified in Milwaukee, that he sold 90 per cent. of the volume of fasteners in suit. He also stated that since 1921 he has manufactured approximately 2,000,000 of these fasteners. That is an average of 333,000 per year for a six-year period. Yesterday he testified that during the year 1926 he made 1,800,000 fasteners. Of this, 400,000 being of that type of the patent in suit; a difference of, approximately, 133,000 per year more than the average for a six-year period—that would bring it down to a difference of, approximately, 66,000 per year more than the average for a six-year period.

MR. LIVERANCE: For the year 1926?

THE WITNESS: Yes. It is hard to reconcile these figures, inasmuch as the sale of the fastener of the patent in suit is, and has been, on the decline for a year or more and is being superseded by the so-called spring type of fasteners. He testified as to having sold 1,800,000 of all types, and 400,000 of the type of the patent in suit, which would show that he has sold, according to his statement, 1,400,000 fasteners of the so-called spring type.

MR. LIVERANCE: The answer is objected to as argumentative, as wholly immaterial to the question; and, it is pointed out that a discrepancy of 66,000 for the last year on a latch which has been going six years, between the sales of the last year and the average for the six years, is not only inconsistent, but is perfectly consistent, for the reason that the general average for the six years is materially reduced by reason of the small sales for the first year when it was first offered on the market, as shown by Plaintiffs' Exhibit H, wherein the total sales for the first year were only 169,745; for the second year, 319,348; for the third year, 366,985; the fourth year, 474,593; the fifth year, 390,182; and the next year, sixth year, 374,894. If the latch in suit had jumped immediately to a grand average for the full six years in the first year, and had not varied or increased for the succeeding years, it would be something which never occurred in any other line of business, previously.

CROSS-EXAMINATION.

Witness stated that the number of latches which he says the Dent Hardware Company made during 1926 were sold to refrigerator manufacturers and distributors of refrigerator hardware.

XQ. 5. Did you sell any to manufacturers of store fixtures?

A. No; we don't sell them.

XQ. 6. Did you sell any to the Garden City Plating Company, of Chicago?

A. Yes.

The Garden City Plating Company are manufacturers as well as distributors and the hardware sold by them finds its way into the hands of refrigerator manufacturers to the best of the witness' knowledge. He does not know this for a certainty other than that they issue a regular refrigerator catalogue bulletin. To the best of witness' knowledge and belief the Garden City Plating Company of Chicago manufactures store fixtures and store fixture hardware and it sells a large volume of hardware consisting of miscellaneous items, most of which finds its way into the hands of store fixture people for the reason that this is one of their lines of business. Witness has no knowledge as to the fact that the Garden City Plating Company is primarily concerned with store fixture business.

Asked how many of the 700,000 in round numbers refrigerator latches were sold direct to refrigerator manufacturers by the Dent Company, witness did not have the data available giving that information, but that it was much over 250,000.

XQ. 14. Yesterday you said that the Herrick Manufacturing Company bought 100,000 of the Dent or Conroy type of latch. How many refrigerators a year do the Herrick Manufacturing Company make?

A. I don't think that the record will show that I made any such statement.

XQ. 15. I may be mistaken, but my understanding is that you testified to a sale of 100,000, approximately, of the Conroy or Dent fastener, and that you sold this fastener only to the Herrick Manufacturing Company. In so far as the refrigerator trade is concerned,—what

I am trying to find out is how many of these fasteners went to the refrigerator companies. I understood you to say that the Herrick was the only one you sold to as a refrigerator company; is that correct?

A. No; there are other concerns that we sell to.

XQ. 16. Which ones?

A. I am unable to mention any particular ones just at this moment.

XQ. 17. The Herrick makes about 12,000 refrigerators a year, do they not?

A. I have no knowledge of the exact amount of refrigerators the Herrick Company makes in the course of the year.

XQ. 18. They make a high-grade refrigerator?

A. They are supposed to make high-grade refrigerators.

XQ. 19. And in small amounts compared to the others?

A. The Herrick Refrigerator Company is not the largest refrigerator company in the country, but they have been manufacturing a line of refrigerators for a great many years, and so far as we know, they build a high-grade refrigerator.

XQ. 20. Do you know how many fasteners for refrigerators you sold the Herrick Company last year?

A. You are speaking of this particular fastener?

XQ. 21. Of the Dent type?

A. I would say that we sold them, in round numbers, 52,000.

Re-Direct Examination.

On re-direct examination a catalogue of refrigerator hardware of the Dent Company, marked Volume C, was offered in evidence as Defendant's Exhibit No. 12; and a large catalogue designated Volume B was offered in evidence as Defendant's Exhibit No. 13.

This latter being a catalog of the Dent Hardware Company for refrigerator hardware and refrigerator specialties. The witness stated that thirty-three of the sixty or more refrigerator manufacturers were customers of the Dent Company, some of them being the largest manufacturers of refrigerators, and of the list on page 21 of the Winters & Crampton catalog several concerns are customers of the Dent Company and that several are listed of which the witness has never heard before. The Dent Hardware Company sells the customers which the witness referred to both fasteners and hinges, but not all of their supply of latches, as there are very few refrigerator manufacturers today who buy their entire requirements from one source of supply. Of the total 700,000 fasteners they sold yearly 186,476 were of the spring type, the balance were of other types which included the fastener shown at the upper part of page 8 of the catalog, Defendant's Exhibit No. 12. The witness was unable to tell approximately the number of the particular fasteners referred to on said page 8. He could not say whether half of them were of that type.

He identified the latch shown on the opposite page 9 as the Condit type.

HUGO GIBSON, of Philadelphia, a consulting engineer, qualified as an expert in patent suits on the basis of general education at the City of London School, Finborough Technical School, Finborough, London. After completion of the engineering course he had been associated with various manufacturers and electrical concerns in the practice of mechanical and electrical engineering. He had previously acted as expert in patent suits including the Selden automobile. He

had previously made inventions and taken out patents on the same.

Witness said he was familiar with the patent in suit, its drawings, specification and claims and the structure shown and described. He had also seen and was familiar with the physical specimens of the plaintiffs' and defendant's latches in dispute.

Q. 6. Generally speaking, what would you say was the function of the refrigerator latches or fasteners which you have seen or may be familiar with?

A. The function is practically the same as that of the ordinary latch of a common door, to hold it closed, to permit of it being opened and more particularly to permit of its being opened easily, without undue effort.

Q. 7. How about the automatic locking feature of these latches you have referred to when the door is slammed; is or is not that generally present in these fasteners?

A. It is present very frequently, and for many years past it has been, but not in all latches.

Refrigerator latches generally consist of two elements, a latch and a keeper. The keeper sometimes has been placed upon the door jamb and sometimes upon the door and sometimes the latch has been upon the opposite member.

Referring to the specification of the patent in suit, No. 1,385,102, witness stated that the statement of the invention referring to a Condit latch was not a complete reference to the prior art and at the time of application for the patent there were many other latches which in general accomplished the object intended.

The witness read into the record, lines 37 and 45 of Patent 1,385,102 and in answer to a question stated that there was no novelty, as that object is or was accomplished by several very old patents. The witness referred to the Keil Patent No. 554,448 and also an ex-

hibit of the Keil structure, Defendant's Exhibit No. 3, and stated:

> "Both this patent of 1896 and the physical example of the Keil latch, show us a latch in which the keeper is fastened to the jamb. The latch proper is fastened to the door, and the relations of the latch to the keeper are such that the door can be slammed shut irrespective of the position that may be occupied by the handle of the latch. That is to say, that if the handle of the latch should happen to be in either a horizontal position or vertical position while the door is being closed, the latch will automatically fasten the door to its casing. Furthermore, this latch has the purpose of providing a leverage, so that the door may be broken away from its seal when it is closed and more readily opened thereby."

Witness also said that the specimen of the latch and keeper shown by Defendant's Exhibit No. 1 conforms to the Dent Patent of 1901, No. 670,506, and that the handle or latch will trip when the door is closed, no matter whether the latch is in horizontal or vertical position and is also further provided for breaking the seal of the door and rendering it more easy to open.

Witness was shown the next patent in point of time, that of Charles, June 10, 1902, and also an exhibit conforming thereto, marked "Defendant's Exhibit No. 10," and stated that such physical specimen was a construction under the Charles Patent of 1902 and that the lever will trip and operate for closing the door whether the lever is in vertical or horizontal position and the arrangement provides a means for opening the door and breaking the seal readily. In all three exhibits, Keil, Dent and Charles, there is provision for standing the door open when the latch is actuated and the latch lever will automatically trip when the door is slammed no matter whether it is in vertical or horizontal position.

MR. FAIRBANKS: Counsel for defendant now offers in evidence defendant's file wrapper as "Exhibit No. 14," and the same is shown the witness.

By MR. FAIRBANKS:

Q. 18. Mr. Gibson, now, let us consider separately, the keeper and latch lever of the plaintiffs' patent, the file wrapper of the patent in suit; and, in this connection I now hand you the file wrapper of the patent in suit, and direct your attention to the original claim 7, which was cancelled. Will you please read that original, cancelled claim 7 into the record and state whether or not the structure in that claim 7 conforms to the plaintiffs' keeper—structure as being in Plaintiffs' Exhibit B.

MR. LIVERANCE: That is objected to as entirely irrelevant and immaterial to any issue in this cause. No claim in the patent is directed to the keeper and the issues of this cause are not concerned with the dead and cancelled claim in the file wrapper history. Moreover, the file wrapper history of this patent, speaks for itself.

THE WITNESS: (After reading claim 7). It does describe the structure of the keeper of the patent, and also the Plaintiffs' Physical Exhibit "B."

By MR. FAIRBANKS:

Q. 19. Will you please, now, turn to the next page of the Patent Office action of April 15th, 1921, and read into the record that action?

MR. LIVERANCE: The same objection; it is entirely immaterial.

The Office action of April 15, 1921, was read, showing the rejection of claim 7 as not patentable over the patents to Keil, 554,448 and Ward, 1,250,-

736 and further showing that the remaining claims were allowed, and making reference to three patents to show the art in amending. These three patents were No. 670,506 to Dent; No. 743,716 to Hadka; and No. 1,238,876 to Blye. The patentee's response was to cancel claim 7. There was only one Office action in the case.

Q. 21. You have already briefly explained as to the Keil patent which the Patent Examiner cited in connection with the cancelled claim 7. I wish you would briefly refer to the Ward Patent No. 1,250,736 which the Examiner stated, in substance, showed the plaintiffs' keeper, and just explain as to the keeper of the Ward patent, briefly.

MR. LIVERANCE: I make the same objection.

THE WITNESS: The keeper of the Ward patent of 1917 is covered by the wording of the cancelled claim 7.

Q. 22. In view of the plaintiffs' transactions in the Patent Office, and in view of the disclosures of the Keil and Ward patents just referred to, what would you say as to the plaintiffs' keeper?

A. There is no novelty whatever in the plaintiffs' keeper, and they acknowledged that in cancelling the claim.

MR. LIVERANCE: As far as any claim in the patent is directed to the keeper, no charge has ever been made of an infringement of the keeper, *per se,* not only by the plaintiff acknowledging that the keeper, itself, was not new in its transcript in the Patent Office, but it acknowledges on the record, that so far as the keeper is concerned no claim is made for infringement of the keeper alone. The infringement charge is made to the claims which are in the patent, not to the claim which has been cancelled by the Patent Office.

Q. 23. Now, let us take up the other principle of the plaintiffs' device, and that is a lever which is defined in claim 5 of the patent in suit. Will you please read claim 5 into the record, and say whether or not there is any novelty in the plaintiffs' latch or lever as defined in said claim 5, making reference to any prior patent of which you may have knowledge?

In making your answer, please refrain from construing such a claim, as that is the province of the Court, and please confine yourself solely to the mechanisms involved in that.

A. Claim 5 of the patent in suit reads as follows:

> "In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including one arm extending from the pivot, a handle portion extending in the opposite direction from the pivot, and a second arm extending from the handle portion adjacent to the pivot and in a direction substantially at right angles to the first arm, substantially as described."

This claim covering a latch lever discloses a lever with a handle portion and two projections in different directions; and I find that it is clearly descriptive of the latch of Ambrum & Olfermann, which was patented on April 22d, 1873, and intended for use in connection with icebox refrigerator doors.

This lever of Ambrum & Olfermann's has a handle portion, a projection in line with the handle portion on the other side of the pivot, and a projection substantially around the pivot and at approximately right angles to the first projection.

In the Simmons patent of 1867, there is shown a lever having a handle portion, a projection on the other side of the pivot opposite to the handle portion, and a lever or arm projecting at approximately right angles to the line of the first two portions mentioned, and situated in the locality of the pivot.

The Charles patent of 1902 has a projecting latch lever, pivotally mounted, and including one arm extending from the pivot, a handle portion extending in an opposite direction from the pivot, and a second arm extending from the handle portion adjacent to the pivot, and in a direction substantially right angles to the first arm. I am here quoting from the wording of claim 5 of the patent in suit.

The Weist patent of 1909 has all of the elements referred to.

The Raaths patent of 1912 has a latch lever pivotally mounted, this lever including one arm extending from the pivot and a handle portion extending in an opposite direction from the pivot; a second arm extending from the handle portion adjacent to the pivot, and in a direction substantially at right angles to the first arm. This Raaths patent was a tripping door latch.

The parts of the latch, and their disposition, as stated in this claim, are clearly shown in the patents referred to, especially in the case of the Ambrum & Olfermann of 1873, the Charles patent of 1902 and the Raaths patent of 1912.

MR. FAIRBANKS: I offer in evidence the Ambrum & Olfermann patent referred to by the witness as Defendant's Exhibit No. 15; the Simmons patent as Defendant's Exhibit No. 16; the Weist patent as Defendant's Exhibit No. 17, and the Raaths patent as Defendant's Exhibit No. 18.

The defendant also offers in evidence the Ward patent as Defendant's Exhibit No. 19.

The defendant further offers in evidence a colored plate containing a radius scale concerning all the patents referred to wherein the lever element is clearly red-marked. This is offered as Defendant's Exhibit No. 20.

By Mr. Fairbanks:

Q. 24. Will you please, now, consider Claim No. 6 of the patent in suit which calls for an addition to the structure of claim 5 which you have already discussed, the elements of cam surfaces on the arms—please refer to any patents you may have knowledge of which show the structure defined in the plaintiffs' claim 6, which you may read into the record.

A. Claim 6 of the patent in suit reads as follows:

> "A latch containing the elements in combination defined in claim 5, said arms on their inner sides being formed with cam surfaces, substantially as described."

It is clear that the latch lever of Ambrum & Olfermann had not only the elements of claim 5, but it also has the cam surfaces which are called for in claim 6. These cam surfaces are at the end of the two arms of the Ambrum latch lever. The arms of the Simmons patent operate as cams; therefore, have the cam surfaces. The arms of the latch lever of the Charles patent have cam surfaces, exactly as described in claim 6. So for the arms of the Weist patent, and in the Weist patent the door latch lever there shown has cam surfaces upon each of the two arms, and upon their inner sides.

I should have also said that the Ambrum latch lever has this cam surface—these cam surfaces upon their inner sides; also, the Charles and Simmons.

Q. 25. In view of your recent discussion of the plaintiffs' keeper, and the plaintiffs' latch lever, considered individually, or *per se*, what would you say as to the novelty of each?

> Mr. Liverance: That is objected to, as the answer will invade the province of the Court; and, is an attempt to construe the claim which a previous question asked the witness not to do.

THE WITNESS: Since these prior patents that I have referred to show the elements called for in claims 5 and 6, those elements were, obviously, not novel.

By MR. FAIRBANKS:

Q. 26. Will you please state exactly what in your judgment as an engineer these plaintiffs may have invented?

MR. LIVERANCE: That is objected to as irrelevant and immaterial. The patent speaks for itself for the Court to construe.

By MR. FAIRBANKS:

Q. 27. In making your answer, you might refer to claim 2 of the patent in suit, if you want to.

A. I have read claim 2 of the patent in suit, and I find just one item therein which might be considered an invention, and that is the provision of surfaces on the upper side of the keeper for a specific purpose in this case, that purpose being the co-action with what is in that claim called a second arm of the latch lever, whereby the co-action of that keeper, upper side, and that arm will cause the latch to trip when it is in a vertical position. Otherwise, the remainder of the claim seems to cover prior patents.

Q. 28. Will you now, please, consider briefly claims 1, 3, 4 and 7 of the patent in suit, and point out the elements in those claims which are characteristic or definitive of what the claims may have involved, invented?

A. I have read claims 1, 3, 4 and 7. In the case of claim 2 I could co-relate the second arm referred to in that claim as projecting from the handle portion, a distance from the pivot as to its use with the portion of the keeper referred to in the claims, as formed with upper and lower curved outer sides, etc., but in order

to do so, I would have to read the drawings and decide thereby that that was what was intended to be accomplished.

As to claim 3, which contains in general terms, in referring to means on the keeper and means on the latch lever to accomplish certain objects, I would in this case have to turn to the drawings, and I would then clearly understand what those means were, and what they were intended to accomplish.

Therefore, by considering the drawings I would say that the co-action of the upper curved surface of the keeper with the lever arm which is placed at a distance from the pivot, is the item which the inventors of the patent in suit had in mind and invented.

Referring to claim 4, where two arms of the latch lever are referred to, one of which is engaged with the outer portion of the keeper when the door is moved to a closing position, would swing the lever from vertical position to a horizontal position, I believe that those words cover the invention, and, here again, one would have to refer to the drawing in order to determine which outer portion of the keeper was to be used for this purpose.

In claim 7, it would be also necessary to refer to the drawings, in order to understand just how the second arm referred to in that claim was to engage with the keeper in order to carry out the invention of the inventors, and in that engagement, in my opinion, lies the invention, and not otherwise.

Q. 29. Will you please now, consider claim 3 of the patent in suit, and state whether or not you find the elements therein substantially present in the Keil and Dent patents, or in the physical specimens, Defendant's Exhibits Nos. 3 and 1?

A. In claim 3 there is specified that in combination with the door and casing, there is a keeper attached to the casing and the latch lever pivotally con-

nected to the door. I find those elements both in the patents referred to and in the physical specimens.

The claim says that the latch lever shall be engaged with the keeper to hold the door in a closed position, and that arrangement is clearly present in both the patents and physical specimens.

Means are called for in that claim, on the keeper and other means on the latch lever, to engage with the keeper on the outer sides thereof, to swing the lever into engagement with the keeper at the inner sides thereof when the door is closed, with it in either vertical or horizontal, and those means are clearly found in both the patents and the physical exhibits of Keil and Dent.

Q. 30. Will you please now, describe this claim 3 in connection with the Charles Patent No. 702,185, and the Defendant's Exhibit No. 10, and say whether or not you find in said Charles—the exhibits and patents —substantially the elements recited in said claim 3.

A. Except for the fact that in the Charles patent and the Charles physical exhibit, the latch lever is placed upon a door post or jamb and is applied to the door which is simply a reversal of position. Inasmuch as the Charles physical exhibit could have been constructed in the opposite manner, I find that claim 3 describes the latch and keeper of the Charles device perfectly.

Q. 31. Please, now, take up defendant's structure as exemplified in Plaintiffs' Exhibit "C," which I now hand you, and then Defendant's Patent No. 1,575,647, granted March 9th, 1926, and explain any differences and advantages which you may find in said defendant's structure as compared with the plaintiffs' structure.

MR. LIVERANCE: Objected to as immaterial. Whether or not the defendant made any improvement over Winters & Crampton is not material to this question. The question is not about any ad-

vantages, improvements or inventions which the defendant's structure may disclose, but whether the defendant's structure incorporated what is exclusively granted to Winters & Crampton in their patent.

A. (Continuing.) I have examined the patent of the defendant, also the Physical Exhibit "B" of the plaintiffs, which is the defendant's latch, and I find the outstanding difference between the defendant's and the plaintiffs' latches lies in the fact that there is no use whatever made of the upper edge of the keeper, for any purpose whatever in the operation of the latch.

There is an upper edge present, as there has to be in every keeper of this general form; but, it is not formed or arranged to function in any manner.

The upper edge that I am referring to would do the same thing as is referred to in the plaintiffs' patent in suit. In the words "side or sides" as found in the specifications and claims.

In fact, the defendant's keeper has only two so-called sides or edges for the functioning of the lock, and those sides or edges are found in several of the old patents that I have previously referred to.

The second great difference between the defendant's and the plaintiffs' keeper lies in the provision by the defendant, in his patent and in this exhibit, of the special structure of lug projection standing out from the side of the keeper toward the door, and this latch and this projecting lug has a very important, valuable and new function in the operation of door latches, especially of those which are intended for use on refrigerators and iceboxes, where the requirement is that the latch shall be capable of fastening the door tightly by the mere act of slamming the door, and without the aid of manual operation of the latch. This projecting lug of the defendant's keeper is part of the valuable invention that the inventor Schraeder made. It is ar-

ranged to co-operate with the novel arrangement of cam surfaces, located as close as possible to the pivot portion of the body of the handle or latch. The remainder of the latch handle of the Schraeder invention consists of an arm projecting from the pivot portion and arranged to engage with the common, single, outer edge and the locking inner edge of the keeper, while the handle used for manual operation of the latch projects from the pivot portion of the latch in an opposite direction to this arm.

The Schraeder latch accomplishes a new object in that when icebox doors having fully automatic latches thereon are slammed, by pushing the door rapidly toward the closure, there is always a great tendency to break off or damage portions of the latch or keeper, due to the hammer-like blow that is received by the pivot latch and the keeper.

It is clear to me that the cam-like portion of the Schraeder latch, placed as it is in such close-coupled relation to the pivot portion, and arranged as it is to strike upon the projecting lug of the Schraeder keeper invention, it will be subjected to the least possible strain when under the shock of impact on slamming the door; and consequently, the whole structure is less liable to damage from such impact shocks than would be the case where the impact shock is taken by a portion of the latch which is far removed from the pivotal point. Consequently, the Schraeder latch would be longer-wearing, less liable to breakage, and may be constructed in a lighter manner than locks otherwise arranged.

Q. 32. What would you say as to the length of the radius or range of actuation of the top, oblique cams, which co-act with the lateral extending inner lug or pin of the keeper——

Mr. Liverance (Interrupting): Same objection as heretofore made.

By Mr. Fairbanks:

Q. 33 (Continuing.) Is there any advantage in this feature, and state whether or not you find it to be a development of the general structure present with the four or five Schraeder patents referred to in Mr. Dent's examination?

A. In my previous answer, I referred to the cam or striking portion of the defendant's latch as being close-coupled to the pivot portion, and by that I meant that the striking cam portion is at as short a radius as possible from the pivot. This short radius is in contradiction to the long radius which is evident in the plaintiffs' patent in suit, and the physical exhibit "B."

The second arm referred to in that patent in suit is specified to be, and is necessarily, at a distance from the pivot point, and being so placed brings about the excessive strain and liability of distortion or breakage of the lever arm, and when such breakage does occur it would, naturally, occur at the narrow neck portion of the plaintiffs' structure, next to the pivot, and would render the latch lever inoperative whereas in the defendant's structure, it would be impossible to destroy the operativeness of the latch by this means, on account of the close-coupling of the cam portion to the pivot portion, or on account of the short radius at which that cam portion is provided in relation to the pivot portion.

I have examined the various Schraeder patents, and I find this close-coupled cam of the latch lever, and the co-acting projecting lug of the keeper in the Schraeder Patent No. 1,114,296 of 1914, and in fact, Mr. Schraeder seems to have had the value of this close-coupling of the initial striking portion of the lever very much in mind in several of his patents which illustrate that feature very clearly.

Q. 35. Please look at lines 57 to 72 on page 2 of the Schraeder Patent No. 1,575,647, and read the same

into the record, and say whether or not that is a fairly accurate and correct statement as to certain of the differences between plaintiffs' and defendant's devices.

MR. LIVERANCE: That is objected to as wholly immaterial, the question in this case being concerned with what Winters & Crampton invented, and what the Dent Hardware Company have appropriated from the Winters & Crampton patent in suit, and is in no way concerned with the Schraeder patents nor any differences which it might recite.

The witness replied that there was a correct statement of the differences between these devices.

Q. 36. Please, now, look at plaintiffs' and defendant's devices as embodied in the physical exhibit, Plaintiffs' Exhibit "B" and Plaintiffs' Exhibit "C," and consider the same purely as mechanisms, and state whether or not if the defendant's lever was substituted for the plaintiffs' lever, in the plaintiffs' device, the plaintiffs' device would be operable?

A. It would not.

Q. 37. I now ask you the same question with respect to the keeper, if defendant's keeper was substituted for the plaintiffs' keeper in plaintiffs' device, would this device be operable?

A. It would not.

Q. 38. If the plaintiffs' lever was substituted for defendant's lever in the defendant's device, would the defendant's device be operable?

A. It would not.

Q. 38a. If the plaintiffs' keeper were substituted for the defendant's keeper, in the defendant's device, would the defendant's device be operable?

A. It would not.

Q. 39. Will you please, now, finally, briefly consider claims 1, 2, 4 and 7 of the plaintiffs' patent, and

specify the mechanical elements therein which are lacking in the defendant's structure?

A. In claim 1 of plaintiffs' patent, there is specified, at the end of that claim, another arm projecting from the handle portion, a distance from the pivot, and lying nearly at right angles to the first arm of the lever. There is no such arm in the defendant's structure. In the early part of the claim, in describing the keeper and the head thereof, are the words: "Said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point." The upper curved side referred to in this claim, is, essentially, in the plaintiffs' device, but has no function in the defendant's device, and no such upper curved surface or side is found in the defendant's patent.

It might be well for me to state that in defendant's structure, being Plaintiffs' Exhibit "C," an upper curved edge does occur as a matter of ornamentation, but that curved portion has no function, and might just as well be straight, as shown in the defendant's patent drawing. But, there are those two distinct differences between these structures concerned.

In claim 2 of the plaintiff's patent, we also find a defined specification of the requirement: "An upper curved outer side," and also: "A second arm projecting from the handle portion at an angle to the first arm and adapted to ride against the upper outer side of the keeper." Neither the upper curved side of the keeper, nor the second arm projecting from the handle and adapted to ride against the upper outer side of the keeper, are present in the defendant's patent or the physical exhibit.

In claim 4 of the patent in suit, there is provided two arms on the latch lever, one of which is engaged with the outer portion of the keeper when the door is moved to a closing position, to swing the lever from

vertical position to a horizontal position and engage the other arm under the keeper, and the other of which is engaged with a different outer portion of the keeper when the door is moved to closing position. One of these two arms specified in the patent in suit is not present in the defendant's patent or exhibit nor is there any arm in the defendant's patent or exhibit which engages one outer portion of the keeper in conjunction with the engagement of another arm with another outer portion of the keeper, it being intended by the inventors that the outer portions of the keeper referred to are the outer portions shown in the drawing of the patent, and that the lever arms referred to engaged with these portions of the keeper as indicated in the drawings of the patent.

In claim 7 of the patent in suit, the inventors specify a lever with a second arm projecting from the handle portion of the lever within a short distance from its pivot. Said keeper being formed at its outer sides for engagement with the respective arms of the lever, for the purpose that they had in mind; and, there is no such second arm projecting from the handle portion of the defendant's lever which could be engaged with that portion of the keeper which is intended to be used for that purpose in the plaintiffs' patent in suit, as illustrated in the drawings, and as described in the specifications.

Q. 40. If you were given the plaintiffs' patent—that is, their drawings and specifications—and were requested to reproduce the same, would you make anything like the defendant's device—that is, following the instructions of the plaintiffs' patent?

MR. LIVERANCE: That is objected to as entirely irrelevant and immaterial.

THE WITNESS: I could not.

CROSS-EXAMINATION.

By MR. LIVERANCE:

XQ. 41. In the two exhibits, Plaintiffs' Exhibit "B", which is the plaintiffs' latch made in accordance with the patent in suit, and Plaintiffs' Exhibit "C", which is the latch—alleged infringing latch made by the defendant, each member which is attached to the door includes a base and upstanding post at the upper end of which is an overhanging arm over the base; is that not true?

A. That is true.

XQ. 42. And between the base and overhanging arm is a latch lever, pivotally connected, the latch lever in both cases including a handle portion and one arm in substantial alignment with the handle portion; that is true?

A. Yes.

XQ. 43. Projecting from each latch lever are in one case, what has been termed an arm in Plaintiffs' Exhibit "B", which has a cam under-side, and what has been termed in another case a diagonal cam member with a cam under-side. Is or is not that true?

A. Except for the use of the words "substituted with a cam." I refer to the arm projecting from the lever, prime "B", that is substantially correct.

XQ. 44. It has no rounded innerside?

A. It has three rounded corners, and which the patent in suit illustrates and describes as a cam surface.

XQ. 45. On page 2, one place where it occurred, beginning with line 10—if you will read that, and on page 1, beginning with line 10——

A. The patent does describe a cam surface on that arm.

XQ. 46. Now, the keeper attached to the door frame in both instances, includes a base with an outer

horizontal extending post, and a head in each exhibit having an inner side with which the arm of the latch lever is in substantial alignment with the handle that is engaged when the door is closed; isn't that correct?

A. Yes.

XQ. 47. And each of these keepers at the lower outer side of the head has a curved outer edge?

A. Yes.

XQ. 48. Against which, when the door is closed, with the lever in a horizontal position, the arm which is in substantial alignment with the handle rides, and it permits the handle to pass under the nose of the keeper; is that correct?

A. Yes.

XQ. 49. The difference in the keepers, as I understand your testimony, is that in the defendant's latch, Exhibit "C", a lug projects from the side of defendant's keeper, no lug present in the plaintiffs' keeper——

A. No, that is not the difference in the keepers. There is the difference which you speak of, but in addition to that, there is the difference of the top edges, or as it is expressed in the patent in suit, the sides of the keeper, which, in the patent in suit, are used for a definite purpose in co-action with the arm of the plaintiffs' lever, whereas the upper edge or side, so called, of the defendant's keeper has no such function; nor is there an arm to engage with it.

XQ. 50. In other words, that part of the defendant's keeper, above the lug, so far as function is concerned, is surplusage?

A. That part of defendant's keeper which is above the lug, in the defendant's keeper, physical exhibit, is entirely unnecessary, and is, therefore, merely ornamentation, and the same remarks apply in general to the drawing of the defendant's patent.

XQ. 51. I call your attention to a large sized latch, that is, I believe you will agree, identical with the latch the defendant's show on the door and casing of Exhibit "C", and I direct your attention to the file marking across the keeper, at this side (indicating), of the lug when the keeper is, as it would be on the door, and ask if the surplusage, which is for ornamentation purposes only assuming the latch would not turn from vertical to horizontal position in closing the door, assuming the lever to have been in a vertical position, quite as well with it removed as with it on?

A. Please explain what you mean by the term "Surplusage."

XQ. 52. Surplusage is that part outward from the file mark that would show up——

A. You mean that if the outward end of the keeper were sawed-off, then would the keeper and latch lever operate as they were intended to do?

XQ. 53. Yes, in turning from vertical to horizontal position when the lever is in a vertical position on the door.

A. Yes, even if the keeper was so mutilated, and the latch lever were in a vertical position, the projecting lug would still perform its function of turning the latch lever from a vertical to a horizontal position.

MR. LIVERANCE: The large exhibit referred to, is offered in evidence, as Plaintiffs' Exhibit "I."

By MR. LIVERANCE:

XQ. 54. This defendant's latch lever has an arm in alignment with the handle substantially, a projection, whether you call it an arm or diagonal member or what not, which extends at an angle from said lever or arm which is in substantial alignment with the latch handle when the lever is in the horizontal position, engaging against the curved under side of the keeper head, and the projecting member, arm or what-

ever you may call it, which engages with the outer side of the lug when the lever is in a vertical position when the door is closed, the lever will engage against the inner side of the head when the door is closed, irrespective of the vertical or horizontal position of the lever, is or is not that correct?

A. With all due respect to plaintiffs' counsel, I must say that I look upon that as an extremely involved question, as of a "catch" nature, inasmuch as I answered the previous questions in good faith and permitted the mutilation of the keeper for the purpose of answering the exact question put by counsel.

However, may I be permitted to say that if such a stunt or trick were performed upon the keeper of the defendant's patent, it would render it, for practical purpose, entirely inoperative.

XQ. 55. Why?

A. For the reason that what we may call the first arm of the lever, referred to in the plaintiffs' patent, and as used in the defendant's patent, one arm, in alignment with the handle, would then foul the inclined surface or edge, or so-called side as referred to in the plaintiffs' patent which it is intended to engage.

XQ. 56. Did you ever saw one off to find out whether that was true or not?

A. No, I have not; I didn't saw one off, but I can readily see the use of the latch of Plaintiffs' Exhibit "C", and if that outer end of the keeper was sawed off, then the defendant's latch lever would be prevented from operating as intended, inasmuch as the projecting arm would be in line with the handle when in a horizontal position would catch against the surface of the metal which would result from cutting off the portion of the keeper to which you refer.

In other words, it would be a clear mutilation of the device.

MR. LIVERANCE: Inasmuch as the defendant's expert is, as in practically every patent case, an auxiliary counsel for the defendant, and as plaintiffs do not consider an expert necessary in a simple structure like this, it will be necessary for plaintiffs' counsel to reply to the expert arguments on record.

In the Wisconsin suit, an exhibit was filed with the material sawed off from one of the defendant's keepers, so as to bring the outer side of the arm in alignment with the upper, outer side of the keeper; and, it is the position of the plaintiff, that the addition of surplusage to the keeper and then the attempt to re-construct the claims wherein the word "outer" appears to the outer edge of this surplusage and functionally useless material, while at the same time the lug which is on the keeper takes the plane of and is equivalent to what is defined in the claim, is a quibble upon the word "outer"; and, the questions were directed to bringing out this identity of function, mode of operation and identity of structure, as claimed in the claims of the patent in suit.

Witness admitted that in both devices Plaintiffs' Exhibit "C" and Plaintiffs' Exhibit "B" the latch lever are parallel to the plane of the front face of the door and each is susceptible of being turned to an upper or vertical position at which it will stay by reason of the first arm of the lever (the one in alignment with the handle) coming against the lower side of the post of the base upon which the lever is mounted; and is further susceptible of being held in a horizontal position by the lever engaging against the upper side of said post on the base.

XQ. 60. If the lever, in either case, is in that horizontal position, and the door is closed, the lever stand-

ing upwardly until the arm in Plaintiffs' Exhibit "B" closes against the keeper, and is then turned back, so that the first arm in alignment with the handle will engage against the inner side of the keeper, while in the defendant's latch, if in a horizontal position, the same operations will occur, the arm in alignment with the handle riding against the curved side of the keeper head until the member projecting at an angle from the handle strikes the lug throwing the lever back to engage against the inner side of the keeper; is not that correct?

A. That is correct, and in fact you have simply the action of several other and old devices.

XQ. 61. We will talk about the other and old devices later, but at present, that is the action when the levers in these two exhibits are at horizontal?

A. Yes.

XQ. 62. When they are vertical, both levers are turned around to keeper engaging position by the projecting portion on the lever striking against a part of the keeper; isn't that correct?

A. That is correct.

XQ. 63. And in each case, when the door is closed, when the operator opens the door and turns the lever upward, toward vertical position, the projecting arm extending at an angle from the lever, rides against a portion of the keeper, and forces the door open if it is tightly closed, is that correct?

A. That is correct.

XQ. 64. There is identity in the function of the two latches, is there not?

A. There is, and there is not. There are a lot of devices, old devices of the same character.

XQ. 65. There is identity in the principle of operation, is there not?

A. Absolutely no.

XQ. 66. Explain where there is not identity in the principle of operation.

A. Principle of operation, to my mind, means the use—means the way in which the actions are brought about. That is the difference between our patent and another from time immemorial, or from the time of the original patent, whenever that was; and, in this case, as I have already explained, the difference between the action of these two latches lies in the improvement introduced by the defendant's invention over latches of the prior art in accomplishing the objects of the latch with less strain, less liability of damage, the possibility of using lighter parts, and cheaper parts because of their lightness, and in fact because the inventor of the defendant's patent recognized the value of the closed-coupling of the cam to the pivotal part of the latch. Or, in other words, the use of a cam as opposed to the use of a lever whereby the cam may be placed quite close—in fact as close as it is mechanically possible to get anything to the very pivotal part of the latch. And, for this purpose he required to use a specially provided lug projecting from the sidewall of the keeper for the purpose of engaging with that cam of the lever.

XQ. 67. This member on defendant's latch which you call the cam, and which I call the arm, but which is fastened adjacent to the pivot and projects laterally from the latch lever, when it engages the lug there is a turning movement imparted to the latch lever; therefore, necessarily, there must be a lever arm for that turning movement. As an engineer, that is so, is it not?

A. You mean that the cam that I am referring to has the effect of a lever?

XQ. 68. Yes, it has that lever, so that the force applied to that member is applied at a distance from the pivot, and that distance from where the force is ap-

plied to the pivot, is a lever arm for the turning moment of that force?

A. Yes; but I distinctly differentiated in the fact that the cam arrangement permits the advantage to which I have referred and eliminated the disadvantages of a lever co-operating with a portion of the keeper which is far distant from the pivotal portion of the latch lever at the time when the latch is in the process of operation to close the door.

XQ. 69. Both levers have a lever-arm to which the force is applied to turn the levers, do they not?

A. Not by a lever arm, but by means of a device cam which, in a sense, may be referred to as a lever; however, mechanically, a cam is not a lever.

Witness stated that he had read over the Keil patent of which Defendant's Exhibit 3 is a physical exhibit. He remembered reading the operation of the structure in that patent but does not remember it all. The operation of the Keil patent so witness said is well described beginning with line 73, page 1 of said patent.

XQ. 73. That description says that when the door is closed, 5 rides down the incline line of the keeper as indicated in 4 and automatically lifts the handle. Is there any intimation that the lever of the Keil patent is ever to stand horizontally and referring to Exhibit 3, will that lever stand horizontally by itself?

A. I cannot say without reading the Keil patent word for word that there is any statement therein that the lever will or will not stand horizontally at any time in the course of its use; but it appears to me, both from the drawings of the Keil patent and the operation as described in the lines of the specification to which you lately referred, and from the physical exhibit of the Keil patent latch, that this device will operate as intended by its inventor, at any position that the lever of the latch may happen to be in at the time

that the door is slammed shut. Not only that the device would operate with the lever in a horizontal position as well as in a vertical position, but also that that device is so universal in its provisions that notwithstanding the fact that the lever of the Keil can be placed in any position through 180 degrees, that the lever will be fully automatic in its action and will always successfully close and hold the door tight, which is exactly the object of all these old and new refrigerator latches.

XQ. 74. In a normal operation of the Keil latch, as shown on Exhibit "C," does it stand horizontal, or is it vertical?

A. It might be in either one of the two positions throughout that range of 180 degrees.

XQ. 75. What would hold it there?

A. In the upper, vertical position, gravity, plus possible stiffness of the pivotal relation——

XQ. 76. Of what?

A. In the horizontal position, stiffness in the pivotal relation which might be produced in a number of ways in the use of the latch.

XQ. 77. The patent in question doesn't say anything about that, does it?

A. As I said before, I haven't read the Keil patent word for word, with the object of looking for that feature, and not having done so, I cannot say.

XQ. 78. Suppose the pivot was found tight, how long would it remain tight in the normal operation of a refrigerator?

A. In certain circumstances it might remain tight very long; in others, it might even become tight.

XQ. 79. That is your opinion, that it would remain tight, or might become tight?

A. It is my opinion, developed out of my experience with mechanical devices in general and their use.

XQ. 80. In the Charles patent, what would hold the lever in a horizontal position?

A. The same things as I referred to might hold the Keil lever in a horizontal position.

XQ. 81. If you had a tight pivot in the Charles patent, it would be practically inoperative, would it not?

A. I have no reason to believe that that would be the case.

XQ. 82. You said, this morning, in your direct testimony, that the lever in the Ambrum patent, the keeper on the door could be interchanged in the matter you described. Did you ever try to do that?

A. No, but it is easily seen that it could be done.

XQ. 83. Can you design a practical latch that would do it?

A. Yes.

XQ. 84. I would like to have you do that.

A. When?

XQ. 85. Now.

A. Yes. The designing in words, without the use of a drawing board, I would take a latch equipped with this pivot and base plate and place it upon the door in the position now occupied by the keeper. I would take the keeper from the door and by placing the inclined planes of the keeper forwardly instead of as they are, backward, merely to reverse their positions, I would have provided a lock or latch where the keeper was on the door casing or jamb and the lever upon the door.

XQ. 86. Do you think that lever would work?

A. Yes.

XQ. 87. As a matter of fact, the arms of the lever would not engage this inclined portion until the door was actually shut, would they?

A. They certainly would. They would be made to do so.

XQ. 88. Then, they would stand in the way of the lever swinging over——

A. (Interrupting.) Not necessarily at all. They could be designed the way you are trying to indicate, but that would not be a wise thing to do.

XQ. 89. From your description, that is what you did——

A. (Interrupting.) No, certainly not. I mentally designed, described a Charles lock reversed, as to the position of the two functional parts, which would work.

XQ. 90. Are you familiar with the Condit latch?

A. Somewhat.

XQ. 91. The Condit latch has a lever mounted on the door frame or wedge cam with which it engages on the door. Did you ever see any practical latch in these were reversed by any refrigerator manufacturer?

MR. FAIRBANKS: I think Mr. Liverance has a sample of the Condit latch, and perhaps he might be willing to show it to Mr. Gibson, or we will have it marked for identification, so that all hands can be sure what we are talking about.

MR. LIVERANCE: The exhibit to which Mr. Fairbanks refers is produced, and it is offered in evidence as Plaintiffs' Exhibit "J."

THE WITNESS: The Condit latch which you have furnished me with could not be reversed in the sense we are now discussing; but, I would like to say, the Condit patent, inasmuch as I believe variations of the Condit latch have been made under that patent, in which there is a hook on the keeper for engagement with the lever, and such a latch as that could be reversed satisfactorily.

XQ. 92. You said that the Charles patent could be interchanged, and made into a practical refrigerator latch?

A. It could.

XQ. 93. But, the Condit could not?

A. I didn't say the Condit could not. The Condit as I understand it, is not only of a form exactly as the physical Exhibit of Condit which you have presented to me but that there is a Condit latch with a hook which would make it satisfactory for the purpose of reversal of the functional parts of the latch.

XQ. 94. Assuming that there was a hook, could you make an automatic Condit latch that would engage with the keeper, or an automatic Charles latch that would engage with the keeper when the door was closed, with the latch lever mounted on the door, and did anyone ever do it prior to Winters & Crampton?

A. I could; but in regard to the use of the Condit principle, in full automatic form, I would have to do what Mr. Condit did back in 1901. Without going as far as Mr. Condit did, I would probably do what Mr. Schraeder did in 1914, in his patent, Defendant's Exhibit No. 5.

XQ. 95. If you did what Mr. Schraeder did in 1914, you would leave the latch lever on the door frame, would you not?

A. If I had the knowledge of the art that Mr. Schraeder did in 1914, I could have used the prior art in that day, and could have made a latch of the general Condit original form, full automatic, and I could have made it to operate with a latch lever, either on the door post or upon a door.

XQ. 96. The operation of the Dent structure as described in the paragraph on page 1 of the Dent Patent No. 670,506, Defendant's Exhibit No. 2, beginning with line 72, is it not, that portion reading:

> "When the door is pushed shut, the lever 'f' is depressed to force the lug 'g' into the seat 'g' of the wing 'h.' When now the lever 'f' is still further depressed, the cam 'F' of the lever 'f' is forced inward by the weight 'h' of the keeper and

by reason of the slotted connection with the pin or bolt 'e' is permitted to bear directly upon the plate 'd' of the door 'e.' The door will thus be tightly jammed into its seat without strain upon the pivot 'e' of the latch. When the door 'e' is to be opened, the latch 'f' is thrown upward until the lug 'g' strikes upon the wing 'h-2' when the door will be initially pried or forced open."

Is there anything in this operation, or is there anything in the whole description of the patent, which is only a column and three-quarters long, which says that this lever is ever to remain horizontal, in the dotted line position as shown in Figure 2?

A. It is evident in this patent, that the inventor, Mr. Dent, had in mind to have his lever so loose that it would be capable of closing the door reasonably tightly by the action of the weight of the handle, although the patent appears to contain a misprint or misstatement where it refers to the weight "ll" of the keeper; and in such case it is not likely that that inventor intended this device to operate from the horizontal position of the handle. However, it does actually operate from the horizontal position, inasmuch as the inventor shows the handle in a horizontal position, where it co-operates with a part of the keeper shown in the drawings, and if the handle ever should be stuck in a horizontal position, it certainly would operate.

XQ. 97. In your treatment of the claims of the patent in suit, you referred, several times, when discussing certain language of the claims, to the drawings in order to get the meaning of the words used in the claims. In accordance with the same treatment, referring to the drawing and disclosure of the Winters & Crampton patent, and the disclosure of the Condit or the Keil or the Charles patents, in considering claim 7 in each of those three patents, Condit, Keil or Charles,

is there any latch lever, pivotally mounted on the door between its ends, in the same sense, for the same purpose as Winters & Crampton?

A. Concerning the drawings of the Winters & Crampton in relation to claim 7, also the disclosures of the Condit and Keil, the devices are not the same in the sense that the levers of Condit and Keil project outwardly from the face of the door, whereas in Winters & Crampton's the lever operates in the same plane as the door.

However, in the Charles patent, the lever there operates in the same plane of the door, and if reversed in the relation of keeper and latch to door and post, the lever would then operate in the same manner as the Winters & Crampton, and furthermore, in considering these matters, I had in mind the Ward patent, in which the lever operates in the same plane as the door; and, the Schraeder patent, Defendant's Exhibit No. 5, operates in the same plane as the door, even though the latter be shown with the lever attached to the casing which I have reversed onto a door.

XQ. 98. In both the Charles and Schraeder patents, to which you have referred, particularly in the Schraeder patent, what would happen if the lever was turned in a horizontal position, and the door was opened and you tried to close the door?

A. In both these patents, with the lever attached to the door post as shown, and if the levers in each case were in an inwardly, horizontal position, and the door were closed upon them, it would be possible to bend or otherwise damage the lever.

XQ. 99. Then, if I understand your answer correctly to the previous question or two, neither Keil nor Kent has a latch lever pivotally mounted on the door between its ends with one end of the lever to operate

the handle and the other end of the lever, a keeper engaging arm?

A. Both of these are substantially what you describe.

XQ. 100. In the Dent patent, No. 670,506, there is a lever which has one thing formed into a handle, "f"; where the other end appears with a lever pivoted between that and—that is a keeper engaging arm.

A. This, in a general sense, the projection from the lever near the pivotal point is another end of the lever.

XQ. 101. Is it the end of the lever at the opposite side of the pivot, whereas the claim called for one end of the lever being formed into an operating handle and the other into a keeper engaging arm?

A. No, that is not such, any more than is the lever of the Raath's patent.

XQ. 102. In Keil, the same is true, is it not, Keil patent No. 554,558?

A. The same applies.

XQ. 103. And, in the Charles patent the lever is not on the door, but is on the door jamb?

A. Correct, as shown.

XQ. 104. Now, where in the Dent Patent No. 670,506 occurs this element of claim 7, a second arm projecting from the handle portion of the lever, a short distance from its pivot?

A. There is no such arm.

XQ. 105. And, in the Keil patent there are two pins, 4 and 5 projecting laterally from the lever, the axis of which are in substantial alignment with the axis of the pivot?

A. Yes.

XQ. 106. And in the Charles, if we considered the two parts, small "d" and "e" as two arms and "g" as the keeper, which it is, where does anything on the keeper "g" engage with any of these arms?

A. I do not consider the keeper is represented by the letter "g" since the keeper of Charles comprises several functioning parts other than the parts marked "g" in a similar manner to other keepers of other patents which have several functioning parts, and as a matter of fact the parts "i" and "h" of the Charles keeper do connect with the arms "d" and "e."

XQ. 107. Have the parts "d" and "h" any function whatever in holding the lever in close keeper engaging portion, or are they not merely an operation means which incidentally happens to be made integral with the part on which the keeper "g" is?

A. These parts "d" and "h" are made integral of the whole keeper of the Charles patent, in the same way as the curved upper and lower sides of the keeper of Winters & Crampton in suit, are integral with the actual hook of the keeper.

XQ. 108. In the Charles patent you could make the plate which carries the parts "d" and "h" separate and not integral with the part which carries the keeper "g," could you not, and it would function?

A. As a matter of fact, such a mechanical freak could be produced, and in fact the same freak construction could be applied to any keeper, all of these, old and new art.

XQ. 109. How would you make the keeper of the Winters & Crampton structure, or the parts which operate the lever engaged with the arms, separate and not integral and get the same functions in as practical and simple a manner?

A. If I were to start out to produce such a freakish construction, I would divide the keeper into two portions, one of which was a hook that had no other purpose but to hold the door in its closed position, and the other of which projected over the hook portion, not necessarily actually touching the hook portion, but this second part would embody the two incline planes which

are necessary for the functioning of the lever of the Winters & Crampton patent.

XQ. 110. Which of these three patents, Kent, Keil or Schraeder, or any of the others you have referred to, do you consider as showing and anticipating the combination which Winters & Crampton have devised which is shown and described in their patent, serving the same purpose, working on the same principle and conforming to the language of the claims therein; where do you find that combination?

A. I find the general form and purpose of the Winters & Crampton patent to be old, and disclosed in Keil and Dent, Maltbie, of 1885; Baldwin, of 1889; Fritz, 1899; Ward, 1917, and Schraeder, 1918.

However, this keeper of Winters & Crampton's appears to me to have a novel feature, which is the use of the upper inclined edge, or as they call it, "side of the keeper," for operating the second arm of their lever.

I find that the lever, with its special arrangements or arm for use in co-operation with the special upper curved edge of the keeper, seems to me to be a new combination of the relation of those part, although the general structure of both the keeper and the lever appears clearly in the prior art, especially in regard to the general structure of the lever with its two arms, as found in Charles.

I do not find this principle—this broad and novel combination of co-operative portions of lever and keeper in any of the patents or physical exhibits that I have examined and that combination seems to be new.

XQ. 111. In your description of various references which you have considered, you have not attempted to interpret the claims, but have read the claims literally, the early prior claims, particularly claims 5 and 6, have you not, without reference to the principle of the patent in suit?

A. I have tried to relate the disclosures of the earlier patents to the wording of those claims, looking upon the wording as a description of the mechanical object.

RE-DIRECT EXAMINATION.

Witness said that the normal position of the handle of the latch lever in plaintiffs' and defendant's device as shown by Plaintiffs' Exhibits B and C was horizontal.

RDQ. 114. Mr. Liverance asked you if, when both the levers were horizontal, which is their ordinary, normal position, it is not a fact that the terminal of each lever rubbed down the lower curved cam surface of each keeper, and you answered: "Yes." Now, is there anything new or novel, or was there, at the date of the plaintiffs' patent in suit in that construction or function?

A. There was not.

RDQ. 115. The expression "principle of operation" has been frequently used by Mr. Crampton as well as by his counsel, during your cross-examination. Is the principle of operation, broadly speaking the automatic tripping of the latch, new in the plaintiffs' device, in view of the prior art?

A. It is not. That principle has been the object of most of the inventors whose patents have been under discussion in this case.

RDQ. 116. So far as any principle of operation is involved in the plaintiffs' latch, is it merely insuring the tripping of the latch, no matter whether it is horizontal or vertical, is that substantially correct?

A. That is it.

MR. FAIRBANKS: Defendant's counsel offers in evidence a plate marked Defendant's Exhibit No. 21, and the same is shown to Mr. Gibson.

By Mr. Fairbanks:

RDQ. 117. Mr. Gibson, will you very briefly say what is portrayed on this plate, Defendant's Exhibit No. 21, and state whether or not the defendant's latch involves anything more than a rearrangement of parts shown in the Keil and Charles patents?

Mr. Liverance: Objected to as immaterial, irrelevant and entirely improper; as being apparently an argumentative position of the defendant, and one which should be presented by argument rather than by testimony.

A. (Continuing.) Each of the four latches shown on this plate, Exhibit No. 21, are devices which are intended to accomplish exactly the same object, each one of them. They do it, however, in a different mechanical way, somewhat different in the relation of the functioning parts of those levers, and each of them evidently devised for the purpose of introducing an improvement in the art of latches, or the differences between them introducing advantages of operation. For instance, the Keil latch has projections from the side of its body for the purpose of making the latch handle move into the required position for locking the door, also for the purpose of forcing the door open in case it should be closed, etc.

The Charles patent has exactly the same objects, only that it shows two arms projecting in the same plane as the lever handle. These arms do the same things as far as the locking of the door and unlocking of it is concerned, as the projection of the Keil handle.

In the Winters & Crampton lever there again there are two arms, generally in the same plane as the lever, projecting from the lever in much the same way as the two arms of Charles patent project, and for the same purpose.

In the Schraeder patent there is a projection in line with the lever handle and a cam placed very close to the pivot, which, again, is intended to bring about the automatic operations relating to the opening and closing of the ice-box door. All of these accomplish the same object. Some of them accomplish it in more mechanical ways than others, more economical ways, or in ways which will give better results in the general use of the devices.

MR. LIVERANCE: Renewed objection is made to the answer as being argumentative, as stating the position which the defendant will argue before the Court, and further that the plate, Defendant's Exhibit No. 21, shows only a part of each structure, and not the whole combination; and, in that respect is not complete.

On re-cross-examination witness reiterated that the normal position of the latch lever was horizontal, more likely to be horizontal than vertical, though it might sometimes be vertical. That he had operated refrigerators and found it more natural to leave the lever in horizontal position than in vertical.

STIPULATION IN RE NARRATIVE STATEMENT OF TESTIMONY.

(Filed October 17, 1927.)

It is hereby stipulated and agreed by and between counsel for the parties in the above-entitled cause the Court approving, that the statement of evidence herewith submitted is a true condensed statement of the evidence taken in this cause, and has been prepared by counsel for the plaintiffs and submitted to and corrected by counsel for the defendant.

(Sgd.) FRANK E. LIVERANCE, JR.,
Counsel for Plaintiffs.

(Sgd.) E. HAYWARD FAIRBANKS,
Counsel for Defendant.

Stipulation and statement of testimony approved:

(Sgd.) O. B. DICKINSON,
District Judge.

Dated this 15th day of October, 1927.

OPINION, DICKINSON, J., SUR TRIAL HEARING ON PLEADINGS AND PROOFS.

(Filed August 11, 1927.)

This cause concerns Letters Patent No. 1,385,102, for an improved refrigerator door latch lever.

The conclusion reached is that the claims of the Patent (other than 5 and 6) should be so read as to restrict the right granted to the plaintiff's special construction, which the defendant does not infringe, and that Claims 5 and 6 are invalid.

DISCUSSION.

The patent was held to be valid and infringed by decree of the United States District Court for the Eastern District of Wisconsin. The parties were really the same as those before us but the defendant here was not made formally a party to that proceeding. In consequence, the ruling is not asked to be deemed conclusive. An Appeal from that ruling is pending. Were the question ruled in that case, the question here raised we would unhesitatingly follow it because we are in full accord with the views expressed by Judge Geiger upon the feature of the patent which he discussed. We have, however, a wholly different question here raised. The inventive feature and practical value of the plaintiff's latch is that when the door is "slammed to" it will be automatically locked whether the latch lever proper is in the position of pointing toward the door side or jamb side of the refrigerator. This result is accomplished by having two cams respectively so placed as that one operates in one case and the other in the other. There is, as Judge Geiger has expressed it, not "the slightest doubt about the perfect identity of plaintiff's and defendant's devices in a legal sense". This is because of the use of what may be called alternate or double cams in the construction of each device. If, however, this feature had already been appropriated by the prior art, then the only advance made by plaintiff's invention was in the special construction or position of his cam and there would be no infringement unless this special cam feature was copied. This the defendant has not done. Upon the question of how much of the plaintiff's latch was an appropriation of the possessions of the prior art, Judge Geiger expresses no opinion. This question is now the only one. Cams to direct the latch to a locking position are "as old as the hills" as they followed closely upon the latch string. A real advance was made by the shifting of the latch

lever from the jamb to the door. This feature differentiates many of the devices of the older art from those of the present. Another advance was made in what we have called the alternate, or what is perhaps more accurately termed, the double cam feature. These two features in combination permit the door to be closed and locked by a slamming action whether the latch lever be in a vertical or horizontal position. If this combination did not originate with the plaintiff's patentee, the plaintiff and defendant each have the like right to a mere special construction.

This takes us to the Claims of the Patent and back to the prior art. Claims 5 and 6 are subject of special discussion and will be here ignored. The scheme of the improvement outlined in the patent application is that of an advance upon the plan of the Condit latch. The main features are (1) a transference of the latch lever to the door, and (2) to assure the operation of the device whether the latch lever be in a vertical or horizontal position when the door is slammed. The described structure is of a device which meets both these objectives as does likewise the patented device of the defendant. Patentability and infringement are thus both present unless these features be old. Defendant confidently asserts them to be features of "the oldest constructions in this art" and specifically as present in the Keil, Dent and Charles Patents.

It may be here interpolated that Claims 5 and 6 of the patent in suit are for a detached latch and keeper construction. There is a practical admission of the absence of novelty in these constructions aside from the applied features above mentioned, and Claims 5 and 6 have been (at least attempted) to be withdrawn from the case. Whether they can be thus eliminated is in controversy. We mention this now so that it may be clear that we are assuming the keeper and latch (con-

sidered as detached and independently) to belong to the prior art.

We wish also to reiterate that the question is not one of the validity of plaintiffs' patent but the scope of the claims. There is in effect no denial of the right to the specific construction described. Defendant could not well take any other position because it also does business under the assumed protection of a like patent to its special construction. The distinction made has a controlling bearing upon the question of equivalents and consequently upon infringement. The action of the Patent Office in rejecting Claim 7 (as made in the original application) on the Ward and Keil patents and making no reference to prior art bearing upon the other claims, as well as the subsequent allowance of the Schraeder patent, make it manifest that the claims of the patent in suit were read and allowed as for a specific construction. The plaintiffs' application was filed December 7th, 1920. Had the Condit device been a full expression of the accomplishments of the prior art at that time, as the application undoubtedly assumes and as would seem to have been assumed throughout, there could be no doubt that the Claims of the patent (other than 5 and 6) should be read so broadly as to give the patentee the full benefit of the doctrine of equivalents. Keil, however, as early as 1895 (Letters Patent No. 564,448); Dent in 1900 (Letters Patent No. 670,506); Charles in 1901 (Letters Patent No. 702,185); Schraeder in 1914 (Letters Patent No. 1,117,709) and again in 1915 (Letters Patent No. 1,170,685); Ward in 1917 (Letters Patent No. 1,250,736), and Schrader still again in 1917 (Letters Patent No. 1,265,120) all describe devices which, if after the patent in suit and if the claims of the latter are broadly read, would be infringements. There is in consequence no novelty in the features in respect to which the patent in suit is asserted to be an advance upon the Condit device, to wit,

placing the keeper upon the door jamb and the lever upon the door and providing for the closing of the door without regard to the position of the lever. We make this latter statement with confidence because in the argument addressed to us this closing of the door with indifference to the position of the latch lever was asserted to be prevented in the devices of the old art solely by the fact that the lever latch was placed on the jamb. This leaves to the plaintiffs no exclusive right except to the particular construction of their device. There can be no denial of the fact that this device has many merits. It is simple, of neat appearance, durable and effective and in all these respects an improvement upon the latches before in use. Although the plaintiffs have exposed themselves to the charge of overstating the favorable reception given to this latch by the trade, we can well believe that it found a ready sale. There is likewise room for at least the suspicion that the defendant sought to "cut in" on the plaintiffs' trade by making a latch, in the druggist phrase, "just as good", and that the differences in the two devices are only such as to make a difference in special construction. That there is such difference is evidenced by the findings of the Patent Office in granting a patent to each. We are here concerned only with plaintiffs' claim of right to a monopoly, and we hold that they have none except to a latch of their own special construction, and this right our finding is the defendant does not infringe. With respect to Claims 5 and 6 a word must be added. It is a wise and general practice in patent cases to select the claims which, as the phrase goes are "in issue". All the Claims of this patent were thus put in issue and the defendant was at some pains and expense to answer to Claims 5 and 6. It was not until the argument that the plaintiff sought to withdraw these claims. We will not stop to discuss any of the questions raised

but content ourselves with the finding that Claims 5 and 6 are of no validity.

An appropriate decree in accordance with this opinion may be submitted.

DECREE.

(Filed August 12, 1927.)

Before DICKINSON, *J.*

This cause having come on to be heard upon pleadings and proofs and Frank E. Liverance, Jr., Esq., having been heard on the part of plaintiffs, and E. Hayward Fairbanks, Esq., having been heard on the part of the defendant, both having submitted briefs and due deliberation having been had, it is

ORDERED, ADJUDGED and DECREED, that the bill of complaint herein be and the same is hereby dismissed with costs to defendant to be taxed by the clerk.

By THE COURT,

DICKINSON, *J.*
U. S. D. J.

Approved as to form.

CYRUS N. ANDERSON,
Solicitor for Plaintiffs.

PETITION FOR APPEAL.

(Filed October 10, 1927.)

The above-named plaintiffs, Alexander F. Winters and Basil R. Crampton, conceiving themselves aggrieved by the decree made and entered in the above-entitled cause on the twelfth day of August, 1927, dismissing their bill of complaint, hereby appeal from said decree to the United States Circuit Court of Appeals for the Third Circuit for the reasons set forth in the assignments of errors filed herewith; and pray that their appeal may be allowed and that citation be issued as provided by law, and that a transcript of the records, proceedings and papers upon which said decree was based, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Third Circuit sitting in Philadelphia, Pennsylvania.

Your petitioners further pray that the proper order touching the security to be required of them to perfect their appeal be made.

(Sgd.) CYRUS N. ANDERSON,
Solicitor for Plaintiffs.

(Sgd.) FRANK E. LIVERANCE, JR.,
Counsel for Plaintiffs.

ORDER ALLOWING APPEAL.

(Filed October 10, 1927.)

Before DICKINSON, *J.*

Appeal allowed upon filing security for costs as required by law in the sum of two hundred and fifty ($250) dollars.

By THE COURT,

Attest:
E. G. JOHNSON,
Deputy Clerk.

October 10, 1927.

ASSIGNMENTS OF ERROR ON APPEAL.

(Filed October 10, 1927.)

Now comes the plaintiffs, Alexander F. Winters and Basil R. Crampton, by their counsel and saying that in the decree entered August 12, 1927, in the above cause the Court erred in the following particulars:

1. In ordering that the bill of complaint be dismissed.

2. In awarding costs to the defendant.

3. In finding claims 5 and 6 of Patent No. 1,385,-102, invalid and not infringed by the defendant.

4. In finding claims 1, 2, 3, 4, and 7 of said patent No. 1,385,102, not infringed by the defendant, and in not finding said claims 1, 2, 3, 4 and 7 of said patent infringed by the defendant.

CYRUS N. ANDERSON,
Solicitor for Plaintiffs.

FRANK E. LIVERANCE, JR.,
Counsel for Plaintiffs

PRÆCIPE FOR RECORD ON APPEAL.

(Filed October 10, 1927.)

To the Clerk of the Court:

Will you please prepare a transcript of the record in the above-entitled cause for the Circuit Court of Appeals for the Third Circuit, and include therein the testimony as required by the rule, the same having been prepared by counsel for plaintiffs and settled here by stipulation and approved by the Court. Please include the following documents which are to be printed:

Docket Entries.

The Bill of Complaint.

The Answer.

Opinion of Court.

Decree.

Petition for and allowance of Appeal.

Assignments of Errors.

Præcipe of Appeal Record.

Plaintiffs' Exhibit A, Winters & Crampton Patent 1,385,102, in suit.

Plaintiffs' Exhibit D, certified copy of the decree of Judge Geiger.

Plaintiffs' Exhibit E, Conroy Patent 332,495.

Plaintiffs' Exhibit H, compilation of latches of patent in suit sold 1921 to 1926.

Defendant's Exhibit 2, Dent Patent 670,506.

Defendant's Exhibit 4, Keil Patent 554,448.

Defendant's Exhibit 5, Schraeder Patent 1,114,296.

Defendant's Exhibit 6, Schraeder Patent 1,117,709.

Defendant's Exhibit 7, Schraeder Patent 1,170,685.

Defendant's Exhibit 8, Schraeder Patent 1,265,120.

Defendant's Exhibit 9, Schraeder Patent 1,575,647.

Defendant's Exhibit 11, Charles Patent 702,185.

Defendant's Exhibit 14, File wrapper history of the patent in suit.

Defendant's Exhibit 15, Ambrum *et al.* Patent 138,112.

Defendant's Exhibit 16, Simmons Patent 62,078.

Defendant's Exhibit 17, Weist Patent 934,253.

Defendant's Exhibit 18, Raaths Patent 1,022,872.

Defendant's Exhibit 19, Ward Patent 1,250,736.

Defendant's Exhibit 20, Colored plate.

Defendant's Exhibit 21, Colored plate.

Stipulation *in re:* Narrative Statement of Evidence.

Statement of Evidence.

Please forward to the clerk of the Circuit Court of Appeals for the Third Circuit the following exhibits which are not to be printed:

Plaintiffs' Exhibit B, latch structure of the patent in suit.

Plaintiffs' Exhibit C, defendant's latch structure.

Plaintiffs' Exhibit F, Winters & Crampton catalog.

Plaintiffs' Exhibit G, Conroy specimen latch.

Plaintiffs' Exhibit I, defendant's large size latch.

Plaintiffs' Exhibit J, Condit latch.

Defendant's Exhibit 1, specimen of latch of Dent patent.

Defendant's Exhibit 3, specimen of latch of Keil patent.

Defendant's Exhibit 10, specimen of latch of Charles patent.

Defendant's Exhibit 12, defendant's catalog, Volume C.

Defendant's Exhibit 13, defendant's catalog, Volume B.

(Sgd.) FRANK LIVERANCE, JR.,
Counsel for Plaintiffs.

Approved:
E. HAYWARD FAIRBANKS,
Counsel for Defendant.

CLERK'S CERTIFICATE.

DISTRICT COURT OF THE UNITED STATES OF AMERICA,
EASTERN DISTRICT OF PENNSYLVANIA.

I, GEORGE BRODBECK, Clerk of the District Court of United States for the Eastern District of Pennsylvania, do hereby certify that the annexed and foregoing is a true and faithful copy of so much of the pleas and proceedings; in the case of Alexander F. Winters and Basil R. Crampton v. Dent Hardware Company, No. 3999 March Term, 1927, as per præcipe filed, a copy of which is hereto attached, the transcript of record in the above-entitled cause is to include now remaining among the records of the said court in my office.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the seal of said District Court at Philadelphia, this
(Seal) nineteenth day of October, in the year of our Lord one thousand nine hundred and twenty-seven and in the one hundred and fifty-second year of the Independence of the United States.

GEORGE BRODBECK,
Clerk.

PLAINTIFFS' EXHIBIT A.

U. S. Patent No. 1,385,102, to A. F. Winters and B. R. Crampton.

A. F. WINTERS AND B. R. CRAMPTON.

LATCH.

APPLICATION FILED DEC. 7, 1920.

1,385,102.

Patented July 19, 1921.

2 SHEETS—SHEET 1.

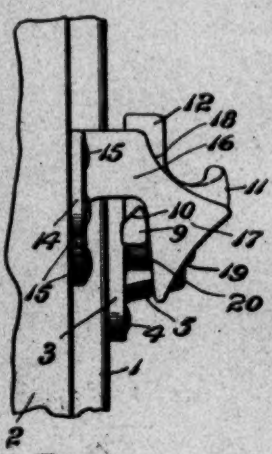

Fig. 2.

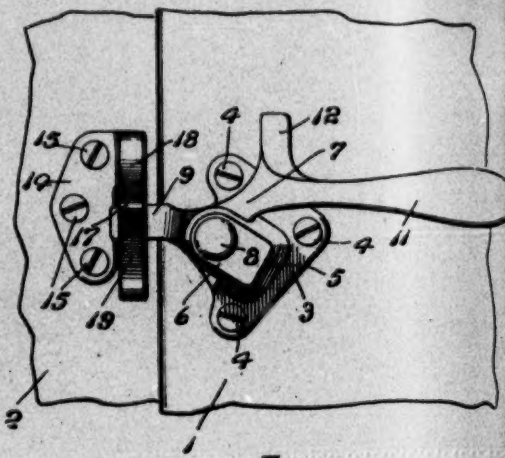

Fig. 1.

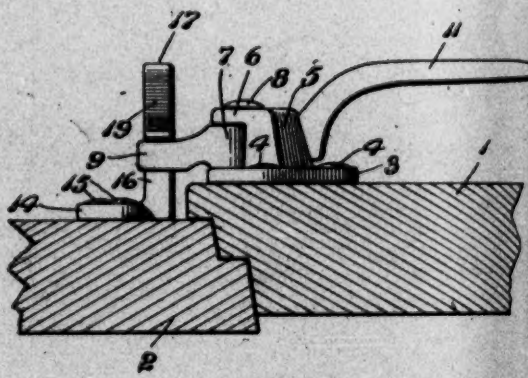

Fig. 3.

Inventors

Alexander F. Winters

Basil R. Crampton

By Frank E. Livermore

A. F. WINTERS AND B. R. CRAMPTON.

LATCH.

APPLICATION FILED DEC. 7, 1920.

1,385,102.

Patented July 19, 1921.

2 SHEETS—SHEET 2.

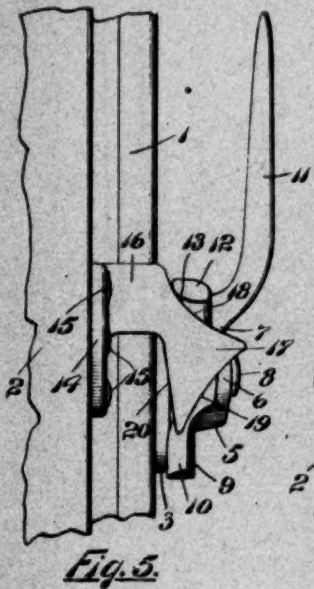

Fig. 5.

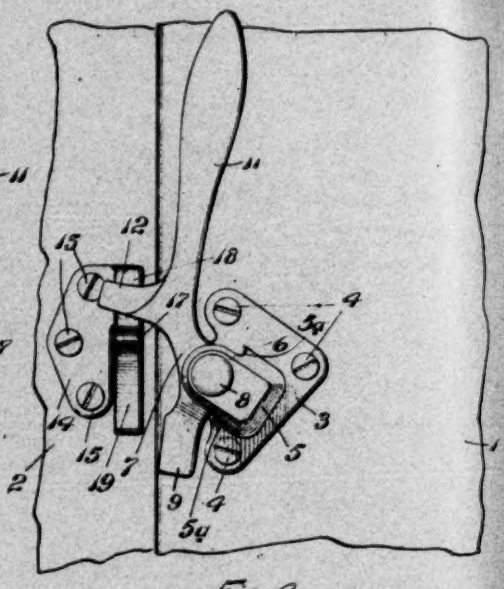

Fig. 4.

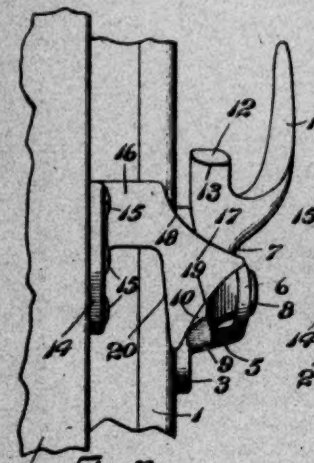

Fig. 7.

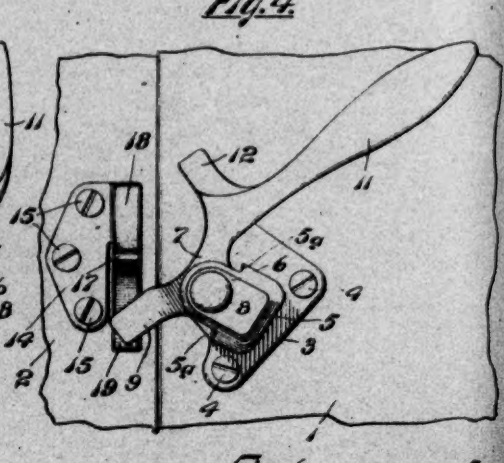

Fig. 6.

Inventors

Alexander F. Winters

Basil R. Crampton

By Frank E. Liverance Jr.

Atty

FOLD OUT IS TOO LARGE TO BE FILMED

UNITED STATES PATENT OFFI

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON, OF GRAND RAPIDS,

LATCH.

1,385,102. Specification of Letters Patent. Patented July

Application filed December 7, 1920. Serial No. 428,891.

To all whom it may concern:

Be it known that we, ALEXANDER F. WINTERS and BASIL R. CRAMPTON, citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Latches; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a latch of the swinging lever type, particularly adapted for use on refrigerators though applicable in many other relations where a door is to be closed and held in closed position. The swinging lever latch, or as it is better known, the Condit latch, is pivotally connected at one end to the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertently swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other.

Fig. 2 is a side elevation there

Fig. 3 is an under plan view the door and adjacent portion o therefor being in section.

Fig. 4 is a view similar to Fig the door approaching closed po the swinging lever in vertical rel door.

Fig. 5 is a side elevation there

Fig. 6 is a front elevation sho tion on the swinging lever as t proaches closed position after sa been in horizontal position, and

Fig. 7 is a side view thereof.

Like reference characters re parts in the different figures o ings.

The door 1 and the adjacent the casing 2 against which the f edge of the door comes in closing fragmentarily, only enough bein disclose the attachment of the keeper thereto. The lever is car door. A base 3, attached to t screws 4 or equivalent connecting an integral outstanding post 5 f at the outer end an arm 6 extend paralleling the base. The lever between said arm and the base pin 8 passed through the same mounting the lever at a point ends. An arm 9 forming a part extends from the pivot and is cross the meeting edges of the do ing when the door is closed and horizontal position, this arm pas the keeper attached to the door c under side of the arm 9 is for angle as indicated at 10 the purpo will later appear.

In the opposite direction the le from the pivot and is formed in 11 set out a distance from the do the passage of the fingers of t between it and the door. A sh

head 17 which is extended downwardly for a distance below the lower edge of the post. The head on its outer sides is formed with two curved surfaces 18 and 19 which come to a point substantially at the front and between the upper and lower ends of said head, while on its inner side it is cut upwardly and inwardly at a slight angle to the vertical, forming a wedging cam 20, as shown.

The latch lever may be thrown to upper position, as shown in Fig. 4, being stopped from going beyond such position by engagement of the arm 9 with the lower shoulder 5ª made by post 5. It may also be carried to a horizontal position, being likewise stopped when it reaches such position by the upper shoulder 5ª. When the door is moved toward closing position with the lever vertically located, the cam side 13 of arm 12 strikes against the curved upper side 18 of head 17, causing the lever to be automatically swung toward the horizontal, and bringing the arm 9 into place so as to pass under the lower point of the keeper head so that it may engage at its outer side against the wedging cam side 20 of the head. It is apparent that by giving the end of handle 11 a downward movement, the door will be wedged tightly shut as the arm 9 moves upwardly and against the incline 20. To open the door it is merely necessary to grasp handle 11 and turn it to upper position, thus releasing the door, and the door may be opened at the same time by pulling outwardly on the handle after arm 9 has disconnected from the keeper.

If the lever has dropped to horizontal position while the door is open, the closure of the door and engagement of the lever with the keeper is accomplished by merely swinging the door shut, in which case, as shown in Figs. 6 and 7, the arm 9 strikes with its inclined cam side 10 against the lower curved side 19 of the head 17 of the keeper, causing the handle to be automatically turned toward vertical position. This movement continues until the arm 9 passes by the lower point of the keeper head 17 or, as usually occurs, the arm 12 comes into contact with the head at the upper side 18, whereupon the lever is actuated so as to bring the arm 9 under the depending portion of the keeper, the same as before described when closing the door with the lever in vertical position. In any case, the latch lever engages with the latch keeper when the door is closed irrespective of the position of the lever. This is a feature of merit in the invention and one of door is of value as use of one hand only is necessary for unlatching and drawing the door open. The ability to close the door and latch it automatically, irrespective of the position of the latch lever insures against injury to the latch or door and also insures that the door will be latched when it is swung shut. All of these features combined in the latch structure make it one of exceptional merit.

We claim:

1. In combination, a door and a casing therefor, a keeper attached to the casing comprising a base, an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member attached to the door comprising a base, an integral outstanding post projecting from the base and a laterally extending arm at the upper end of the post paralleling the base, and a latch lever pivotally mounted between its ends between the said arm and base of said member, said lever having one arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper, a handle portion extending in the opposite direction from the pivot and another arm projecting from the handle portion a distance from the pivot and lying substantially at right angles to the first arm of the lever and likewise being formed with an inner cam side, substantially as and for the purposes described.

2. In combination, a door and a casing therefor, a keeper attached to the casing including an outer head spaced from the casing and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member secured to the door, and a latch lever pivotally mounted between its ends on said member, said lever having one arm extended from the pivot adapted to ride against the lower outer side of the keeper head when the door is closed with the lever in horizontal position to automatically turn the lever to bring said arm back of the head, a handle portion extending in the opposite direction from said pivot and a second arm projecting from the handle portion at an angle to the first arm and adapted to ride against the upper outer side of the keeper when the door is closed with the lever positioned vertically to throw the

door and engageable with the keeper to hold the door in closed position, of means on the keeper and means on the latch lever to engage with the keeper on the outer sides thereof to swing the lever into engagement with the keeper at the inner side thereof when the door is closed with the lever occupying either a vertical or a horizontal position, substantially as described.

4. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the door and engageable with the keeper to hold the door in closed position, of two arms on the latch lever one of which is engaged with an outer portion of the keeper when the door is moved to closing position to swing the lever from a vertical position to a horizontal position and engage the other arm under the keeper, and the other of which is engaged with a different outer portion of the keeper when the door is moved to closing position and the lever is horizontal to turn the lever upwardly toward vertical position or until said other arm passes under and engages with the keeper to hold the door closed, substantially as described.

5. In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including one arm extend
handle portion exten
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tending from the h
the pivot and in a di
right angles to the
as described.

6. A latch contain
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their inner sides be
surfaces, substantiall

7. In combination,
therefor, a keeper at
latch lever pivotally
between its ends, one
formed into an ope
other into a keeper
arm projecting from
the lever a short dist
at an angle to the first
formed at its outer
with the respective a
horizontal and vert
tively, as the door is
operate the lever so
der the keeper whe
closed, substantially

In testimony whe
tures.

ALEXAN
BASIL R.

FOLD OUT IS TOO LARGE TO BE FILMED

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2

PLAINTIFFS' EXHIBIT D.
Certified Copy of the Decree of Judge Geiger.

INTERLOCUTORY DECREE.

The above cause coming on for hearing, on pleadings and proof of both parties and counsel for both parties having been heard, and after full consideration thereof, it is ordered, adjudged and decreed as follows:

1. That patent No. 1,385,102, issued July 19, 1921, for Latch, is a good and valid patent and defendant has infringed the same.

2. That an injunction shall issue out of and under the seal of this Court, restraining defendant, its officers, directors, confederates, agents and employees from manufacturing, selling or using, within the United States of America and its territories, any device which infringes said patent No. 1,385,102.

3. That the case be referred to Harry Kellogg, Esq., Master in Chancery of this Court, to take an account of defendant's gains and profits due to the infringement and plaintiffs' damages caused by the infringement, and report the same to the Court.

4. That plaintiffs recover their costs of suit to be taxed.

(Signed) F. A. GEIGER
District Judge.

Approved as to form:
JOHN W. MCMILLAN,
Counsel for Defendant.

Dated February 24th, 1927.

PLAINTIFFS' EXHIBIT E.

U. S. Patent No. 332,495, to P. J. Conroy.

(No Model.)

P. J. CONROY.

DOOR OR SHUTTER FASTENER.

No. 332,495. Patented Dec. 15, 1885

Fig. 1.

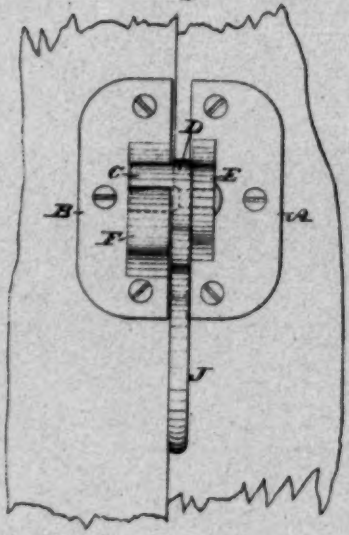


Fig. 2.

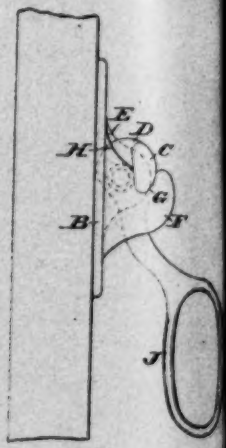
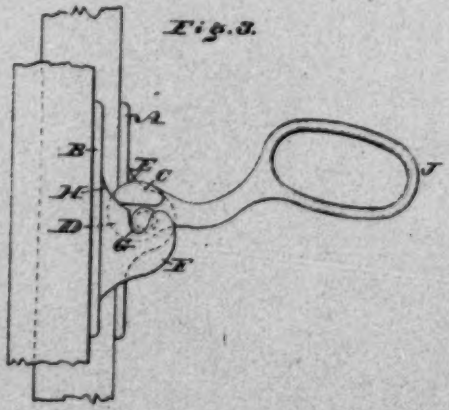


Fig. 3.



WITNESSES

Th. Tolle

H. F. Lindon

INVENTOR

P. J. Conroy

BY Johnson & Dickerson

ATTORNEYS

UNITED STATES PATENT O

PATRICK J. CONROY, OF PHILADELPHIA, PENNSYL

DOOR OR SHUTTER FASTENER.

SPECIFICATION forming part of Letters Patent No. 332,495, dated Dec

Application filed April 29, 1885. Serial No. 163,843. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. CONROY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Door and Shutter Bolts or Fasteners, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a front view of a door or shutter bolt embodying my invention. Figs. 2 and 3 represent side views thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a door or shutter bolt, which may be tightly held in position and easily opened, as will be hereinafter fully set forth.

Referring to the drawings, A and B represent face-plates, which are attached, respectively, to a door and door-frame or to shutters, as required.

C represents a lug, which projects laterally from a head, D, and is somewhat oval in form, said head being eccentrically pivoted to a projection, E, on the face-plate A. From the face-plate B projects a catch, F, which has an opening, G, of the form of the lug C, and receives the same, and on the upper face of the catch F, back of the top of said opening, is an inclined or curved face, H, on which the lug C is adapted to ride, as will be hereinafter set forth. The head D has a handle, J, pendent therefrom, whereby it may be readily rotated.

The operation is as follows: In order to bolt the door or shutters, the handle J is moved outwardly and upwardly, whereby the lug C is raised, and is thereby
over the front end of the c
lowering the handle, the lu
ing G, and, owing to the ec
head D, said lug tightens a
said opening, thus firmly h
shutters in position. By r
the lug C, owing to the ec
head D, emerges from the
rection upward and rearwa
against the face H of the ca
ner of a fulcrum, thus partl
or shutters, and as the lug
est position (see Fig. 3) th
may be opened, said lug p
the catch and the parts bein
is evident. This feature o
lug on the face H is especia
doors, shutters, &c., that st

Having thus described my
claim as new, and desire to
Patent, is—

1. A lug projecting late
having an eccentric axis, and
formed with an opening to
combined and operating su
for the purpose set forth.

2. A lug projecting from
eccentric axis, in combinati
or catch formed with an o
said lug, and a face on whi
when removed from the oper
substantially as described.

PATRICK

Witnesses:
JOHN A. WIEDERSHE
A. P. GRANT.

P. J. CONROY.

DOOR OR SHUTTER FASTENER.

Patented Dec. 15, 1885.

Fig. 1.

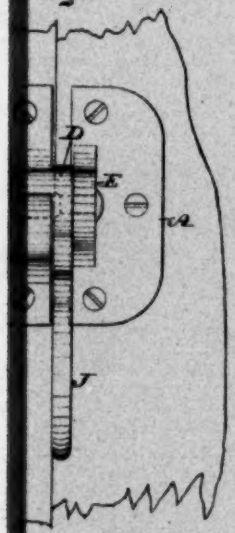


Fig. 2.

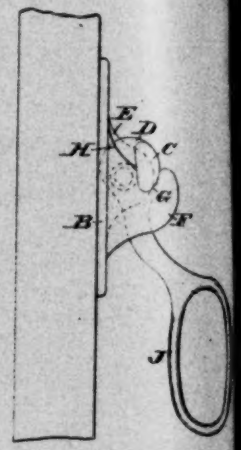
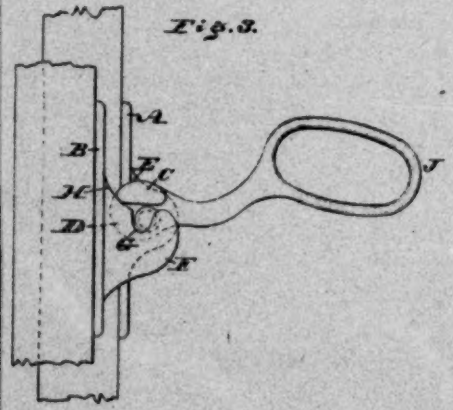


Fig. 3.



INVENTOR.

P. J. Conroy

BY

ATTY.

UNITED STATES PATENT OFFICE.

PATRICK J. CONROY, OF PHILADELPHIA, PENNSYLVANIA.

DOOR OR SHUTTER FASTENER.

SPECIFICATION forming part of Letters Patent No. 332,495, dated December 15, 1885.

Application filed April 29, 1885. Serial No. 163,843. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. CONROY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Door and Shutter Bolts or Fasteners, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a front view of a door or shutter bolt embodying my invention. Figs. 2 and 3 represent side views thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a door or shutter bolt, which may be tightly held in position and easily opened, as will be hereinafter fully set forth.

Referring to the drawings, A and B represent face-plates, which are attached, respectively, to a door and door-frame or to shutters, as required.

C represents a lug, which projects laterally from a head, D, and is somewhat oval in form, said head being eccentrically pivoted to a projection, E, on the face-plate A. From the face-plate B projects a catch, F, which has an opening, G, of the form of the lug C, and receives the same, and on the upper face of the catch F, back of the top of said opening, is an inclined or curved face, H, on which the lug C is adapted to ride, as will be hereinafter set forth. The head D has a handle, J, pendent therefrom, whereby it may be readily rotated.

The operation is as follows: In order to bolt the door or shutters, the handle J is moved outwardly and upwardly, whereby the lug C is raised, and is thereby permitted to pass over the front end of the catch F. Then, by lowering the handle, the lug enters the opening G, and, owing to the eccentric axis of the head D, said lug tightens against the walls of said opening, thus firmly holding the door or shutters in position. By raising the handle J the lug C, owing to the eccentric axis of the head D, emerges from the opening G in a direction upward and rearward, and then abuts against the face H of the catch, after the manner of a fulcrum, thus partly opening the door or shutters, and as the lug is now in its highest position (see Fig. 3) the door or shutters may be opened, said lug passing freely over the catch and the parts being disconnected, as is evident. This feature of the action of the lug on the face H is especially serviceable for doors, shutters, &c., that stick or open hard.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A lug projecting laterally from a head having an eccentric axis, and a keeper or catch formed with an opening to receive said lug, combined and operating substantially as and for the purpose set forth.

2. A lug projecting from a head having an eccentric axis, in combination with a keeper or catch formed with an opening to receive said lug, and a face on which said lug bears when removed from the opening of said catch, substantially as described.

PATRICK J. CONROY.

Witnesses:

JOHN A. WIEDERSHEIM,

A. P. GRANT.

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO THE DENT HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LATCH FOR DOORS.

1,265,120. Specification of Letters Patent. Patented May 7, 1918.

Application filed April 6, 1917. Serial No. 160,121.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Latches for Doors, of which the following is a specification.

My invention has relation to a latch for closing refrigerator doors among other types of doors; and in such connection it relates to the particular constructive arrangement of the same.

The principal objects of my invention are first, to provide a latch with a bolt and an operating lever-handle to latch the door in either the raised or lowered position of the handle by manual pressure exerted against the door or simply slamming the same to thereby cause the bolt to snap into engagement with a keeper therefor; second to provide a latch in which the coiled spring thereof in the compressed condition of the same firmly holds the bolt of the latch so that by pressure exerted manually against the door the spring in expanding, will automatically cause the latch bolt to snap into engagement with the keeper to thus securely lock the door; and third, to provide a latch arranged so that the coiled spring thereof in the event of the spring becoming disarranged or broken, the operating lever-handle of the latch can be manipulated to either release or engage the latch bolt from or with the keeper to thus instantly open or close the door.

The nature and scope as well as characteristic features of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of a latch for a door, embodying the salient features of my invention.

Fig. 2, is a vertical sectional view through the incasement for a latch for a door of my said invention, showing the detail arrangement thereof.

Fig. 3, is a side elevational view partly in broken section, showing the latching member extending through a slotted wall of the incasement therefor and the integral cam of the latching member and the coiled spring, the latter shown in an expanded condition and the operating lever-handle for manipulating the said cam to thereby position the said latch, for the locking of the door.

Fig. 4, is a front end view of the incased latch, with the operating lever-handle, the latching member being shown in a shifted condition with the operating lever handle elevated, whereby upon pressure exerted against or slamming of the door the latch will snap under the keeper-head in the manner for example, as shown in Fig. 1.

Fig. 5, is a rear elevational view of the internal arrangement of the latching element and operating lever-handle.

Fig. 6, is a similar view of a slightly modified form of the operating lever-handle and latching member cam, in this instance provided with a recess for engaging the lug of said handle therein, for shifting said member; and

Fig. 7 is a side elevational view of the keeper, for the latching member.

Referring to the drawings *a*, is a door and a^1, a door frame surrounding the same. The frame a^1, is provided with a keeper a^2, having an inclining offset head a^3, and a rear projection forming a stop or rest a^4, for purposes to be presently explained. *b*, is an incasement provided with end base seats b^1 and b^1, for securing the same to the door *a*. The incasement is provided with a front oblong vertical slot b^2, and with a semi-circular slot b^3, in one of the side walls of the said incasement *b*, both of which slots are provided for purposes to be presently fully explained. The latching member b^4, projects through the semi-circular slot b^3, and is provided with a cam b^5, movably mounted on a spindle or pin b^6, fixed to the side walls of the casing *b*, as clearly shown in Fig. 5. To the forked portion of the cam b^5, is pivoted a slotted connecting rod b^7, carrying thereon a coiled spring *c*; the opposite end of said rod is mounted on a rear spindle or pin b^8, fixed to the side walls of the casing *b*, as clearly shown in Fig. 5. The coiled spring *c*, abuts at one end against the rear portion of the latch cam b^5, and at the opposite end against the spindle or pin b^6. The operating lever-handle *d*, in its preferably curved form extends through the vertical slot b^2, in the front of the casing *b*, and which lever-handle is operable to revolve partially the cam b^5, to thereby actuate the latching member b^4, in the slot b^3,

as clearly shown in Fig. 1. The lever-handle d, is connected with the latch cam b^5 by means of a link b^9, for positively actuating the same and thus to provide a range of movement in substantially the arc of a circle through the slot b^4, of the incasement b, to permit of the setting and holding of the said member to the rear rest a^4 of the keeper-head for while in such position by slamming or pressing the door a, against the frame a^1, to cause the latching-member under compression of the spring c, to be released and snap in a forward direction from the said rest a^4, beneath the head a^3, of the keeper a^2. The latching-member as thus arranged can be manipulated for locking the door in either the lifted or lowered position of the handle d. Furthermore the latch-cam spring b^5, in its expanded position with the latching member b^4, engaged by the head a^3, of the keeper a^2, will hold the door a, in a tightly closed condition against the frame a^1.

The operating lever-handle d, is arranged as shown in Fig. 5, spanning the pin or spindle b^6, and on which the latch-cam b^3, is movably mounted. The extension of the handle d, is held in required alining relationship on the rear spindle or pin b^8, by means of a collar b^{10}, applied thereto, as clearly shown in Fig. 5. This handle is so arranged as to be adapted to release the latching member from its engagement with the keeper-head a^3, whether the cam spring is in a good working condition or not, by simply actuating the same in an upward direction which opens the door a; moreover, it is adapted due to its arrangement to force the door into an open position should the door become swollen or tightened from any cause, by simply manipulating the same, in a vertical direction.

The latch of Fig. 6 in constructive arrangement is the same as hereinbefore described, save that the latch-cam in this instance is formed with a deep recess b^{11}, and the operating lever-handle d, is provided with a side lug d^1, for engaging in said recess for thereby operating said cam and shifting the latching member an integral part of the said cam. In all other respects the latch is the same as illustrated in Figs. 1 to 5 inclusive.

Having described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The combination, in a latch, of a keeper and a cam having a bolt formed therewith and engaging said keeper, a cross-pin, a rod mounted on said pin and connected with said cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.

2. The combination in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, a cross-pin, a rod slidably mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.

3. The combination, in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, said cam provided with a recess, a cross-pin, a rod mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle having a lug arranged to engage the recess of said cam, and said handle pivotally connected with said pin, substantially as and for the purposes described.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

THOS. O. SCHRADER.

Witnesses:
MABEL G. DAVIS,
ELSIE V. LICHTY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

Dec. 29, 1925. 1,567,866

T. O. SCHRADER

LEVER LOCK FOR REFRIGERATOR DOORS

Filed July 23, 1925

Fig. 2.

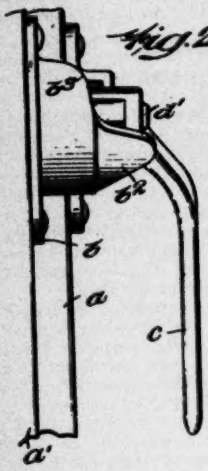


Fig. 1.

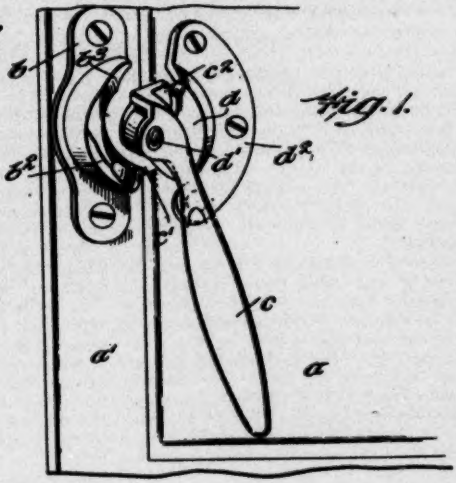


Fig. 4.

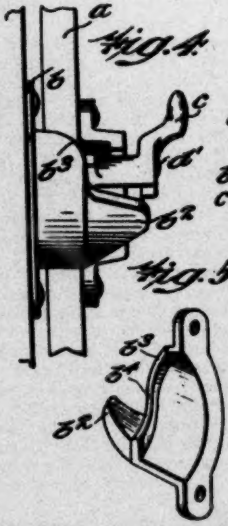


Fig. 3.

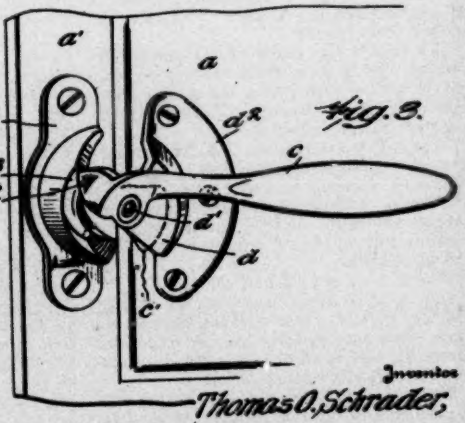


Fig. 5.

Inventor
Thomas O. Schrader,
By Thedinsheus & Fairbanks
Attorneys

Patented Dec. 29, 1925. 1,567,866

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO DENT HARDWARE CO., OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LEVER LOCK FOR REFRIGERATOR DOORS.

Application filed July 23, 1923. Serial No 45,338

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Lever Locks for Refrigerator Doors, of which the following is a specification.

My invention relates to a lever lock for refrigerator and other doors designed to automatically lock the door by slamming and to be released by manual elevations of the lever arm of the lock to cause a cam-like projection of the said arm to ride an inclined surface of the keeper for the said lock and coincidently of the locking tongue engaging an overhanging part of the said keeper to free the tongue therefrom and thus the door to instantly assume an open position.

To the foregoing ends, my invention consists of a lever lock constructively arranged in substantially the manner hereinafter described and claimed.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which:

Fig. 1, is a perspective of a fragmentary part of a refrigerator door and the jamb of the same, showing in application thereto a lever-lock embodying constructively arranged the main features of my said invention and as shown with the door in a locked condition.

Fig. 2, is an end view of the same.

Fig. 3, is a perspective view of a fragmentary part of a door and the jamb of the same, showing the lever-lock in connection therewith and as shown with the door ajar or in a partially open position.

Fig. 4, is an end view of the keeper with the lever lock in the position it occupies with respect to the said keeper, when the door is ajar or in a partially open position; and

Fig. 5, is a perspective view of the rear of the keeper, showing the inner overhanging ledge in detail arrangement thereof.

For the purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings: a represents a fragmentary part of a door; and a^1 the surrounding jamb for the door.

b, is the flat portion of the keeper of the lever lock of my invention secured to the door jamb a^1. This keeper is formed with a semi-circular part the lower front edge of which is provided with a cone-like front b^2, terminating in an upper curvilinear cam-like surface b^3. In the front coned portion of the keeper is provided an overhanging ledge b^4, so that in slamming the door locking the same by the front tongue c^1, of the long lever arm c, of the lock engaging under the ledge b^4, to thereby irstantly hold the door in a closed position.

This lever arm c, is also provided with an integral, rear, cam-like projection c^2, arranged to ride the cam-like surface b^3, of the keeper b, through manipulation of the said lever-arm c, in an upward direction to release the door from its locked position and thus the door to assume a partially open position, as shown in Fig. 3. The bifurcated part of said lever arm c, is pivoted at d^1, to a segment-like bearing d, the flat base d^2, of which is suitably secured to the door a, as clearly shown in Figs. 1 and 3.

By a semi-rotary movement of the lever arm c, through pressure exerted against the door it is locked, but to bring the door into an absolutely air-tight condition with relation to the jamb a^1, this is accomplished by simply exerting a slight downward pressure on the said lever arm c, as well as easily and quickly released from such locked position by the elevating of the said lever arm slightly to thus free the front tongue c^1, of the said lever arm c, from the ledge b^4, of the keeper b, as clearly shown in Figs. 3 and 4.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

A construction of the character stated comprising a housing, a door, a keeper having a flat rear plate secured to said housing and projected forwardly from which is a

semi-circular member, the forward upper edge of said member being provided with an inclined cam-like surface and the lower forward edge of said member having extended forwardly therefrom a relatively cone-like formation provided with an inner, overhanging ledge, the outer curved surface of said semi-circular member being continuous and uninterrupted, a lever arm having a bifurcated portion one extension of which is provided with a front tongue and a rear cam-like projection formed integral with said bifurcated portion, a flat plate secured to said door and provided with a segmental portion which segmental portion is accommodated by said bifurcated portion, a horizontally arranged pivot for connecting said lever and said segmental portion whereby said tongue and rear cam-like projection are respectively arranged to automatically engage the keeper ledge, to lock the door, and to manually permit by riding of said cam-like surface the release of the door from a locked condition.

THOMAS O. SCHRADER.

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Dec. 29, 1925. 1,567,867

T. O. SCHRADER

LEVER LOCK FOR REFRIGERATOR DOORS

Filed July 25, 1925

Fig. 1.

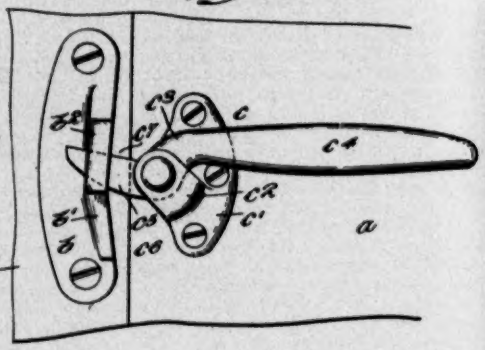


Fig. 2.

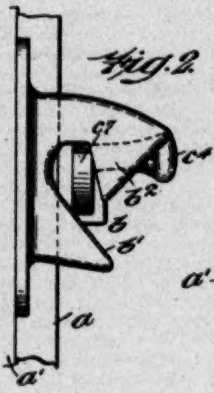
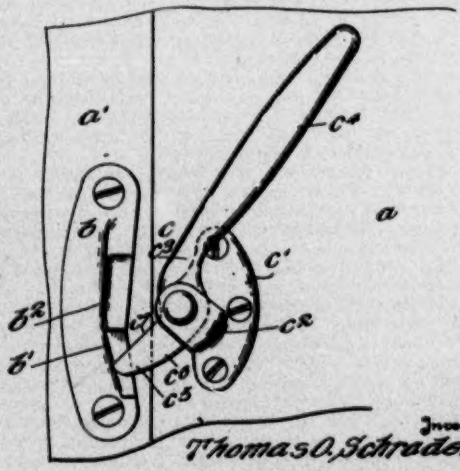


Fig. 4.

Fig. 3.



Inventor
Thomas O. Schrader,
By Middleton & Corbett
Attorneys

Patented Dec. 29, 1925. 1,567,867

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO DENT HARDWARE CO., OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LEVER LOCK FOR REFRIGERATOR DOORS.

Application filed July 25, 1925. Serial No. 45,954.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented a certain new and useful Lever Lock for Refrigerator Doors, of which the following is a specification.

My invention relates to a lever lock for application to refrigerator and other doors constructively designed so that in position locking the door through a slight pressure exerted against the door and this irrespective of what the position of the lever may be prior to a closed condition of the door.

My invention further embraces a lever lock constructively arranged so that through slight energy exerted from the under side to elevate the same will cause the closed door to become ajar or assume a partially open position.

My invention still further embraces a lever lock constructively considered that permits by slight energy exerted from the upper side to cause the door in either the partially open or the actually closed condition to be wedged firmly so as to assume an air-tight condition with respect to fixed surroundings with which the door is in bearing contact.

To which foregoing ends, my invention, stated in general terms, consists of a lever lock of the character defined and constructively arranged in substantially the manner hereinafter described and claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which:

Fig. 1, is a front elevational view of a fragmentary portion of a refrigerator door and surrounding framework, showing a lever-lock embodying constructively the main features of my invention in a wedgingly locked position thereto.

Fig. 2, is an end view of the same.

Fig. 3, is a fragmentary front view of the door and surroundings, with the said lever lock shown in an elevated position and with the door ajar or in a partially open position; and

Fig. 4, is an end view of the same.

For the purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings, a, represents a fragmentary portion of a door; and a^1 the surrounding jamb.

b, is the keeper of the lever lock of my invention, secured to the jamb a^1. This keeper consists of an inclined surface projection b^1, with a recessed tongue b^2, of cone shape, in longitudinal section. The keeper is securely fastened to the jamb a^1.

c, is a bell crank lever-arm of the said lever lock, provided with a base c^1, suitably fastened to the door and having a struck-up bearing c^2, positioned at an acute angle to a vertical plane through the said base. This lever c, is bent upward, as at c^2, from the bifurcated bearing portion c^2, as clearly shown in Fig. 4, and terminating in a long arm or handle c^4. The opposite end of the lever from the bearing portion c^2, is formed into a contracted or narrowed formation c^5, arranged so as to readily ride the inclined formation b^1, of the keeper b, and take under the notched tongue b^2, of the said keeper b, as clearly shown in Fig. 1, by simply exerting a slight pressure against the door tending to a closed condition of the same, which is completed coincidently by the action of the bell crank lever to cause the door to assume the position, for example, as shown in Fig. 2, with the door closed.

The underside of said part c^5 is curved convexly as at c^6 and the upper face is flat as at c^7. Then by a slight manual downward movement exerted on the lever-lock, the door is closed securely against the jamb a^1, in a thoroughly airtight condition. Again, by slightly elevating the lever c, for example, into the position as shown in Fig. 3, thereby causing the door a, to become ajar or partially open, as clearly shown in Fig. 4, and in such position by exerting a slight pressure against the door, to then slightly close the door.

It will be observed that the constructive arrangement of the keeper and lever con-

stituting the locking device of my invention is such as that the keeper will cause the lever to close the door, whether the long handle occupies a perpendicular or horizontal position. In a word, the said device provides a self closing lock for a refrigerator, whether of the household or cold storage type, by a slight pressure manually exerted against the door and with the lever lock, for example, occupying a position such as shown in Fig. 3.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

A device of the character stated comprising a housing, a door therefor, a keeper for said housing comprising a plate secured thereto projected from which plate is a member provided with an inclined surface b^1 and a recessed tongue b^3 of cone-shape in longitudinal section, a lever-lock comprising a base plate secured to said door and having a bifurcated bearing portion, a lever pivoted between the forks of said bearing, the said lever terminating at one end in a handle curved from its pivot point upwardly as at c^2 and terminating at its opposite end in a contracted or narrow formation the under face of which is convexly curved at c^3 and the upper face of which is flat as at c^4.

In testimony whereof, I have hereunto signed my name.

THOMAS O. SCHRADER.

March 9, 1926. 1,575,647

T. O. SCHRADER

LOCK DEVICE FOR REFRIGERATOR DOORS

Filed June 30, 1925

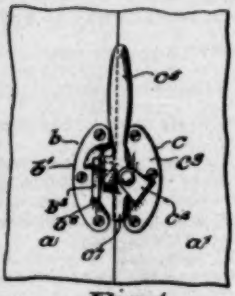


Fig. 1.

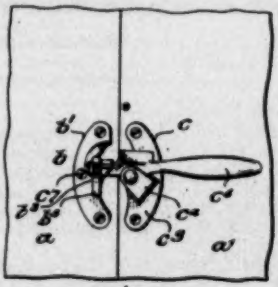


Fig. 2.

Fig. 3.

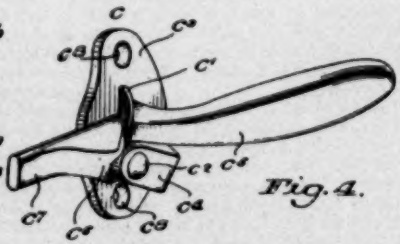


Fig. 4.

Fig. 5.

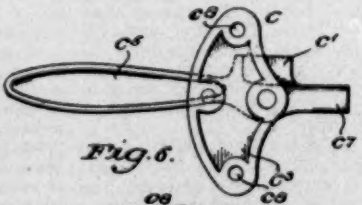


Fig. 6.

Fig. 7.

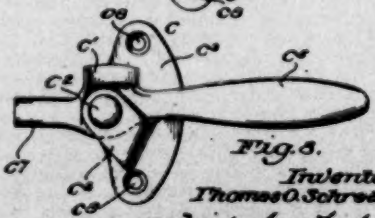


Fig. 8.

Inventor
Thomas O. Schrader
By Middleton & Sanford
Attorneys

Patented Mar. 9, 1926. 1,575,647

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UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO DENT HARDWARE CO., OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCK DEVICE FOR REFRIGERATOR DOORS.

Application filed June 30, 1925. Serial No. 40,474.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at the city of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a certain new and useful Lock Device for Refrigerator Doors, of which the following is a specification.

My invention relates to a locking device for refrigerator and other doors; and in such connection it relates more particularly to a locking device adapted to be operated by the slamming or quick closing of the door, thereby to cause an automatic and instantaneous engagement between a movable tongue member and a stationary keeper of said locking device.

In the employment of locking devices on refrigerators, it is desirable, as well as important, to provide a fastening device for such structures that can be readily and quickly manipulated to both open and to close the door thereof, and also to maintain said door tightly locked, in the closed position, yet nevertheless, in such a manner as to be capable of being easily released when required; and to the foregoing ends, my present invention has been particularly designed, with a view to simplicity of structure and operation for effecting not only quick opening of the door but also quick closing of the same.

My invention, stated in general terms, consists of a refrigerator locking device constructively arranged in substantially the manner hereinafter described and claimed.

The nature and characteristic features of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1 is a fragmentary view in elevation of refrigerator parts showing the same provided with a locking device embodying main features of my invention, with the door of the refrigerator shown in partly open position, and the locking device unlatched.

Figure 2 is a similar view with the locking device in latched position.

Figures 3 and 4 are respectively, enlarged, detached perspective views of the locking device of my present invention comprising the keeper member and the locking member.

Figures 5 and 6 are respectively, rear end views of the keeper and tongue members of the automatically actuating refrigerator lock, defining the particular arrangement of the same, and

Figures 7 and 8 are similar views from the opposite side of the respective keeper and tongue members, showing the structural arrangement of the same.

For the purpose of illustrating my invention I have shown in the accompanying drawings several forms thereof which are at present preferred by me, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings the reference letter a designates a refrigerator structure and a^1 the door thereof. There is shown applied to the structure a, the keeper member b, of my invention, which in structural arrangement, consists of a baseplate b^1, formed with apertures b^2 for the reception of screws, to adapt the same for being secured in place, adjacent to the door opening. The keeper plate b^3 is formed integral with the base plate b^1 and projects upwardly therefrom at substantially a right angle thereto. The keeper plate b^3 is provided with the rear and front downwardly converging concaved edges b^4 and b^5 respectively; meeting in the downwardly projecting nose b^6. The keeper plate b^3 is hollowed out at b^7 on its inner side and is provided with a laterally projecting pin b^8, formed integral therewith and having the convexed front surface b^9, forming a riding surface for a cam c^1, of the locking member c, to be presently fully explained. The laterally projecting pin b^9 of the keeper plate b^3 serves to encounter a cam c^2 of the latch member c when the door is closed, thereby causing the handle c^3 of said latch member c to swing into a horizontal locking position and hence causing the tongue c^4 thereof to be wedged upwardly against the rear concaved edge b^4 of the

keeper plate b^3, by the weight and momentum of the handle c^3, thereby to hold said tongue c^7 securely in such locked position until it is desired to open the door a', for any purpose.

The latch member c consists of a base plate c^3, perforated at c^4, for the reception of screws and provided with a right angular bearing bracket c^6, formed integral therewith, which is adapted to support the pivotal latch c^8. The pivotal latch c^8, carried by the pivot pin or rivet c^9, consists of the handle portion c^3 and the tongue c^7 extending in the opposite direction and in alinement therewith, and is also provided with the inclined concaved cam c' also formed integral therewith, as shown particularly in Figure 4.

The described arrangement of keeper and latch is such that by slamming of the door with the lever rod or handle in a substantially vertical position and with the cam c^5 thereof laterally projecting, the latter will contact with the pin b^9 of the keeper b, so that the handle b^5 will be deflected downwardly causing the tongue to enter the recess b^{10} behind the keeper plate b^3 at the same time the cam c^5 will ride onto the pin b^9, of the said keeper to impart momentum to the handle b^5 and thus to force the tongue c^7 into a wedging position in the recess b^{10} of said keeper thereby to hold the door securely against opening until a reversed movement of the lever rod which causes the cam to ride again over the pin b^9, of the keeper, and simultaneously therewith, causing the tongue c^7 to be withdrawn from the recess b^{10} of the keeper b. In this position, the door occupies an open relation with respect to the refrigerator for access thereto.

The fastener will close automatically, due to the cam action, whether the handle is in horizontal or perpendicular position. When in horizontal position the tongue c^7 rides the strike, or concave edge b^5, and the cam c^5 will strike the pin b^9 as the tongue reaches the nose b^4 or lower terminal of the front concaved edge b^5, and give it momentum to throw the tongue under the rear concaved edge b^4 of the keeper plate into recess b^{10}, closing the latch or fastener. When in perpendicular position the cam c^5 rides the pin b^9, giving the handle momentum to throw the tongue c^7 under the keeper plate b^3 into the recess b^{10}, again throwing the latch into locked position.

I am aware of Patent No. 1385102 dated July 19, 1921, and I disclaim the structure therein disclosed, as my invention is differentiated therefrom, since whereas the structure disclosed in said patent utilizes a pin 12 carried by the latch arm 11, which coacts with an upper cam edge 18 of the keeper member 17; in my novel construction the upper edge of my keeper plate b^3 has no function, but the pivotal latch c^8 carries a cam c^5 inclined to the pivot of said latch and adapted to coact with a pin b^9 carried by and laterally projecting from, the inner wall of the keeper plate b^3 thereby to swing the terminal tongue of the latch into the horizontal locking position; and to none of the constructions of the prior art do I herein make claim.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiments thereof which have been found in practice to give satisfactory and reliable results, it is to be understood that the same are susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:—

1. In a device of the character stated a fixed structure having an opening, a door for closing said opening, a keeper having a pin projecting laterally from its inner wall and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue whereby closing of said door causes said cam to be engaged by said pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

2. In a device of the character stated a fixed structure having an opening, a door for closing said opening a keeper of integral structure having a pin projecting laterally from its inner wall, said pin having its outer wall substantially convexed, and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected integral tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue and integral therewith whereby closing of said door causes said cam to be engaged by said convexed pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

3. In a device of the character stated, a keeper plate having a bottom front, down and rearwardly inclined cam edge and a rear substantially upright locking edge, a pivotally mounted latch member including a handle and a terminal tongue in substantial alignment with each other, and an up-

per cam carried thereby, inclined to the axis of the pivot of said latch member; said terminal tongue being adapted to ride downwardly along said front cam edge of said keeper plate to deflect said latch member into a substantially upright position and said tongue being adapted to interlock with said upright rear locking edge on said keeper plate, when said latch member is in a substantially horizontal position, and a laterally projecting pin carried by the inner wall of said keeper plate and adapted to coact with said upper inclined cam carried by said latch member to deflect the latter from a substantially upright to a horizontal position, so as to cause said terminal tongue to interlock with said rear locking edge of said keeper plate.

THOS. O. SCHRADER.

[fol. 161] Defendant's Exhibit No. 1C

UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF WISCONSIN

ALEXANDER F. WINTERS & BASIL R. CRAMPTON

vs.

SANITARY REFRIGERATOR COMPANY

Downing British Pat. #16,566 of 1891

Nettie Bussinger, Examiner

Wiedersheim & Fairbanks, Philadelphia, Pa.

No. 16,566 (Coat of Arms) A. D. 1891

Date of Application, 29th Sept., 1891. Accepted, 14th Nov., 1891

Complete Specification

Improvements in Fasteners

A Communication from Abroad by Jules Dufaux, Henry Mathieu, and Ernest Andre, All of 89, Rue de la Mare, Paris, in the Republic of France, Manufacturers

I, George Clement Downing, of 8 Quality Court, London W. C., Patent Agent, do hereby declare the nature of my said invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

The object of my invention is to manufacture an improved form of fastener, suitable for locking or securing card board boxes, work boxes, glove and other boxes, Gladstone and other bags, satchels, reticules, pocket books, purses, doors, windows, and other articles requiring the same.

And in order that my said invention may be particularly described and ascertained, reference is hereby made to the

accompanying drawings, in which similar letters of reference indicate corresponding parts.

Fig. 1 shows the invention, unfastened.

Fig. 2 shows the same, fastened.

[fol. 162] Fig. 3 shows one method of fitting the invention to an ordinary box.

Fig. 4 shows the application of the same to a purse or pocket book.

Figs. 5, 6 and 7 illustrate methods of applying the invention to the slats of corsets.

The invention consists of a hook pivoted to a plate, and a stud arranged to enter a slot in the plate, and becomes fixed therein by means of the hook.

Referring to Figs. 1 and 2 A is the stud, which is fixed to the box lid, pocket book flap, or analogous portion of the article, *b* is a plate, which is fixed to the front of the box or other article, *o* is the slot or opening in the plate for the passage of the stud to its position for locking. *f* is a forked hook, pivoted to the plate *b* at *p*. When the device is in the position shown in Fig. 1, the descent of the stud causes contact with the arm f^1 of the hook *f* and the stud turns the hook upon its pivot to the position shown in Fig. 2. The arm f^{11} is thus caused to embrace the stud, which becomes locked in the angular recess.

When the fastening is required to be unlocked, the hook *f* is turned to the position shown in Fig. 1. This may be effected by hand, by moving the lever *l*, as shown in Fig. 1, or by means of a square stud to be turned by a key, as shown at *p*. Fig. 3, wherein the device is shown fitted to a box, the stud A being attached to a tab fixed to the lid. The pivot *p* is in some cases prolonged so as to project outside the box; or it may be arranged so as to be visible outwardly; or it may be concealed so as to form a secret fastener.

In Fig. 4 the invention is shown as applied to pocket books, port-folios, purses, and the like. The plate *b* is furnished with riveting spurs *d d*, which pass through the fabric and are riveted over at the back. The hook *f* is provided with a lever arm *l* for opening the fastener.

In Figs. 5 and 6 the application of the invention to corsets is illustrated. C C^1 are the two slats of the corset. Studs A A^1 are fixed to one slat, C, and non-rotating hooks B b^1 are fixed to the slat C^1. The locking hook *f* is pivoted

to the hook B at *p*, so that when the slat C descends from the position shown in Fig. 6 to that shown in Fig. 5, the hook *f* is rotated upon the pivot *p*, and the relative positions of the slats C C^1 are secured, as shown in Fig. 5. Generally only one of these composite fasteners is used for each corset, this being preferably fixed at the bottom of the [fol. 163] slat, the upper fastenings being formed with fixed hooks b^1 having slots o^1 for the studs A^1 to fall into. All the studs A and A^1 being fixed upon the slat C, act conjointly; and, when the lower stud is withdrawn from its eye, by turning the hook *f* with the aid of its lever *l*, the pressure exerted upon this stud causes the slat C to rise, so that all its studs A A^1 are simultaneously withdrawn from their corresponding fasteners, and the corset is opened throughout its length. The rotation of the hook *f* may be limited by a stop *i* formed therewith. To fasten the corset it is sufficient to press the lower stud A into the fastened B, which is then automatically closed by the forked hook *f*, the remaining studs falling into their respective hooks automatically and securely.

In Fig. 7 a modification of the corset fastening is shown. In this case the hook B is formed similarly to those now in use for corset slats, and only differs therefrom in the lateral opening. The forked hook B is provided with two, nearly similar, prongs; one of which, viz: that closing the opening, has a claw *g*, pivoted at *p*, holding the stud A in the eye of the hook. The elbow *e*, closed by the claw *g*, is combined so as to cause the forked hook to prevent the stud being withdrawn; the stud which is hooked in the usual manner in the hook B, enters the eye *h* in such a manner that it cannot move back, being prevented by the claw *g*. To still further secure the closing of the hook B by the claw *g*, the tail g^1 of the latter is pressed by a spring *r*, fixed upon the slat, and held under an arm *s* of the hook B.

It is obvious that the corset fastenings may be very much varied in matters of detail, while retaining the principal parts, consisting of the hook *b* having a side opening *o*, and the fork *f* having an elbow *e* so formed as to cause the pressure of the stud A to retain the hook in a secure position.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. The improved fastener consisting of the combination of a stud A, a slotted plate *b*, and a pivoted hook *f*, the hook *f* being so formed that when the stud enters the slot *o*, the hook *f* is caused to rotate upon its pivot and securely retain the stud in the fork *e* of the hook, substantially as hereinbefore described and illustrated by the drawings.

2. The application and use of the improved fastener to the slats of corsets in combination with fixed hooks B b^1 [fol. 164] and studs A^1 severally operating substantially as hereinbefore described and illustrated by Figs. 5 and 6 of the drawings.

3. The modification of the improved fastener in its application to the slats of corsets, substantially as hereinbefore described and illustrated by Fig. 7 of the drawings.

4. The general construction arrangements and combinations of the several and respective parts, together forming my invention of improvements in fasteners, substantially as hereinbefore described and illustrated by the drawings.

Dated 29th September 1891.

George C. Downing.

London: Printed for Her Majesty's Stationary Office by Darling & Son, Ltd.—1891

(Here follow side folio pages 165 & 166, 167 & 168, 169 & 170.)

[fol. 171] Clerk's certificate to foregoing transcript omitted in printing.

[fol. 172] Citation, in usual form, showing service on Louis O. French, filed March 25, 1927, omitted in printing.

[fol. 172*a*] Clerk's certificate to foregoing transcript omitmitted in printing.

Fig. 1.

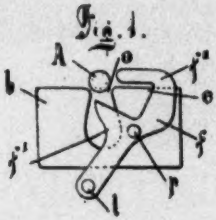


Fig. 2.

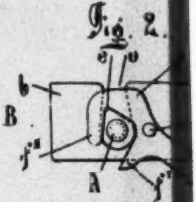


Fig. 3.

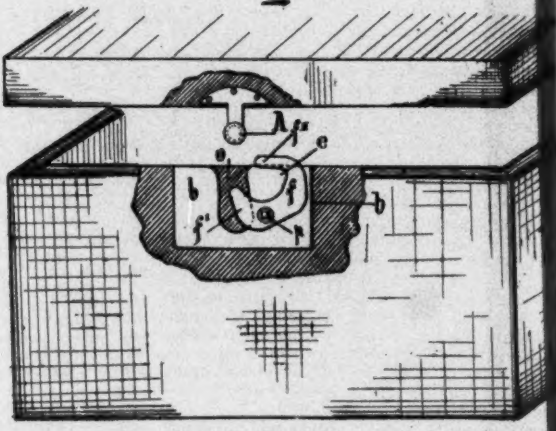
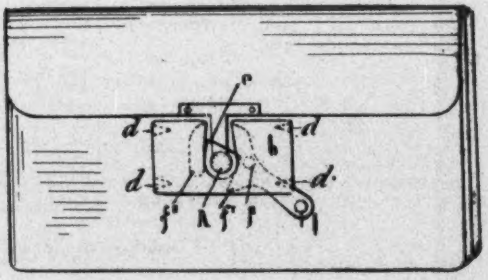


Fig. 4.



Sep. 29. N°. 16,566.
Complete Specification.

(1 sheet)

165-166

Fig. 1.

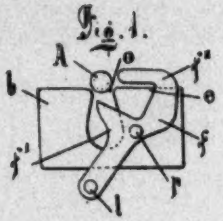


Fig. 2.

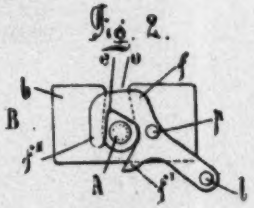


Fig. 3.

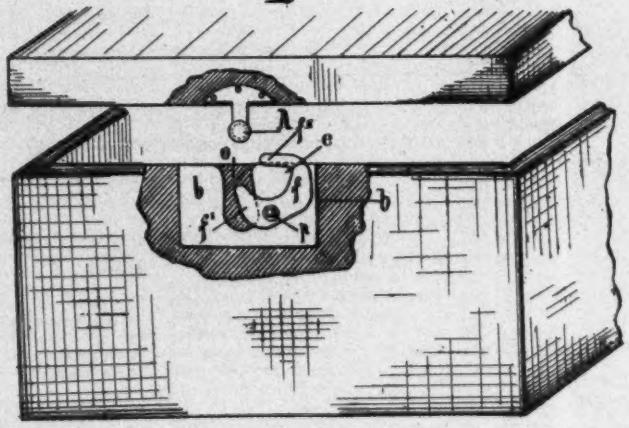


Fig. 4.

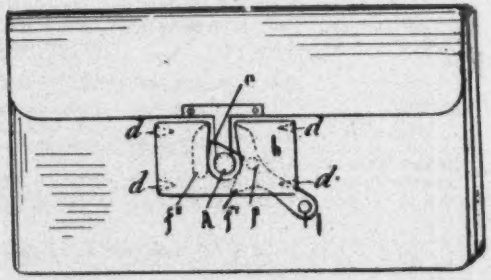


Fig. 5.

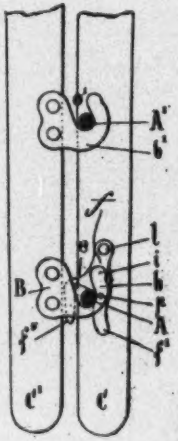


Fig. 6.

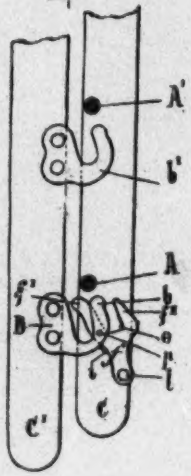
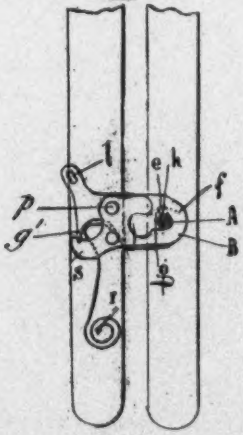
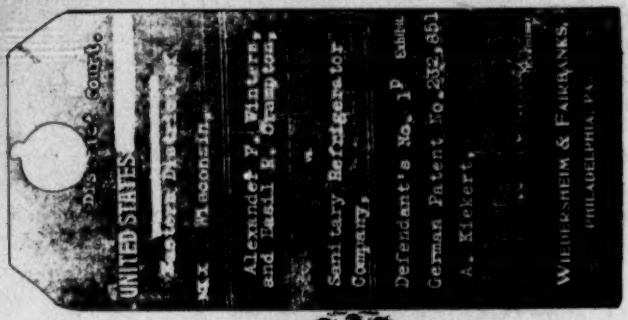


Fig. 7.



[This Drawing is a reproduction of the Original on a reduced scale.]

London: Printed by [illegible]
for Her Majesty's Stationery Office [illegible]



KAISERLICHES PATENTAMT.

PATENTSCHRIFT

№ 232851

KLASSE 68 *d*. GRUPPE 34.

AUGUST KIEKERT IN HEILIGENHAUS, RHLD.

Band für Fensterläden und Türen.

Patentiert im Deutschen Reiche vom 31. Juli 1910 ab.

Die Erfindung betrifft ein Band für Fensterläden und Türen, welches mit einer Vorrichtung versehen ist, durch die der Laden in geöffneter Lage festgestellt werden kann.

Von bekannten Vorrichtungen dieser Art unterscheidet sich der Erfindungsgegenstand dadurch, daß die Feststellvorrichtung aus einem am Band drehbar befestigten und durch einen Schlitz desselben hindurchgeführten Schnepper besteht.

Das Band gemäß der Erfindung ist auf der Zeichnung in einer Ausführungsform veranschaulicht.

An der Rückseite des Bandes sind zwei Winkel *a* befestigt, zwischen welchen ein durch einen Schlitz des Bandes hindurchgeführter Schnepper *b* drehbar befestigt ist. Dieser steht unter dem Einflusse einer Feder *c* und ist hinten mit einem als Griff dienenden Auge *d* versehen. Das Band wird wie üblich an dem Laden oder der Tür befestigt, nur daß diese mit einem Schlitz oder Einschnitt zum Hindurchführen und zur Aufnahme für den hinter dem Band liegenden Teil der Schneppervorrichtung zu versehen ist. Beim Öffnen des Ladens schnappt der Schnepper mit der Nase hinter einen in der Wand befestigten Winkel *e*. Mit diesem kann ein zweiter Winkel *f* verbunden sein, gegen den der Schnepper vorm beim Aufwerfen des Ladens trifft und der verhindert, daß die Wand beschädigt wird.

Da das Band gleichzeitig als Träger für die Schneppervorrichtung dient, so stellt sich diese billiger, als wenn sie für sich anzubringen wäre und mit besonderen Befestigungsplatten versehen sein müßte. Weiter ist auch die Anbringung einfacher, da beim Befestigen des Bandes die Schneppervorrichtung ohne weiteres mit dem Laden verbunden wird. Die Anordnung ist auch noch insofern vorteilhaft, als häufig die Rahmen der Laden so schmal sind, daß nicht genügend Raum zur Anbringung einer besonderen, aus einem Schnepper o. dgl. bestehenden Feststellvorrichtung verbleibt. Selbstverständlich können auch Bänder anderer Art, beispielsweise Winkelbänder mit der Feststellvorrichtung versehen werden.

Patent-Anspruch:

Band für Fensterläden und Türen, welches mit einer Vorrichtung versehen ist, durch die der Laden in geöffneter Lage festgestellt werden kann, dadurch gekennzeichnet, daß die Feststellvorrichtung aus einem am Band drehbar befestigten und durch einen Schlitz desselben hindurchgeführten Schnepper besteht.

Hierzu 1 Blatt Zeichnungen.

Fig. 1.

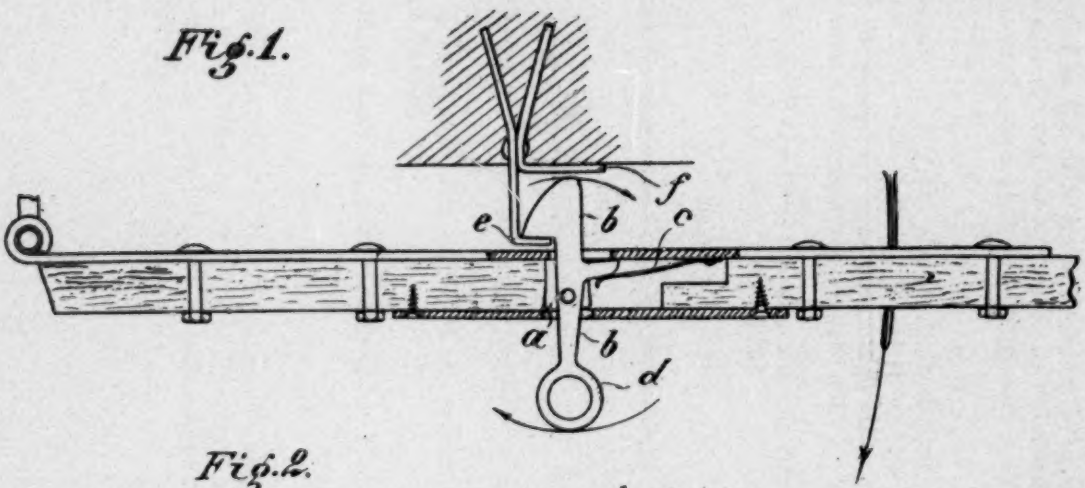
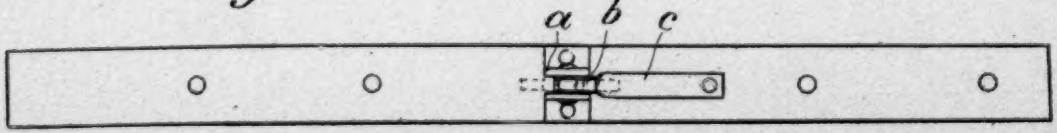
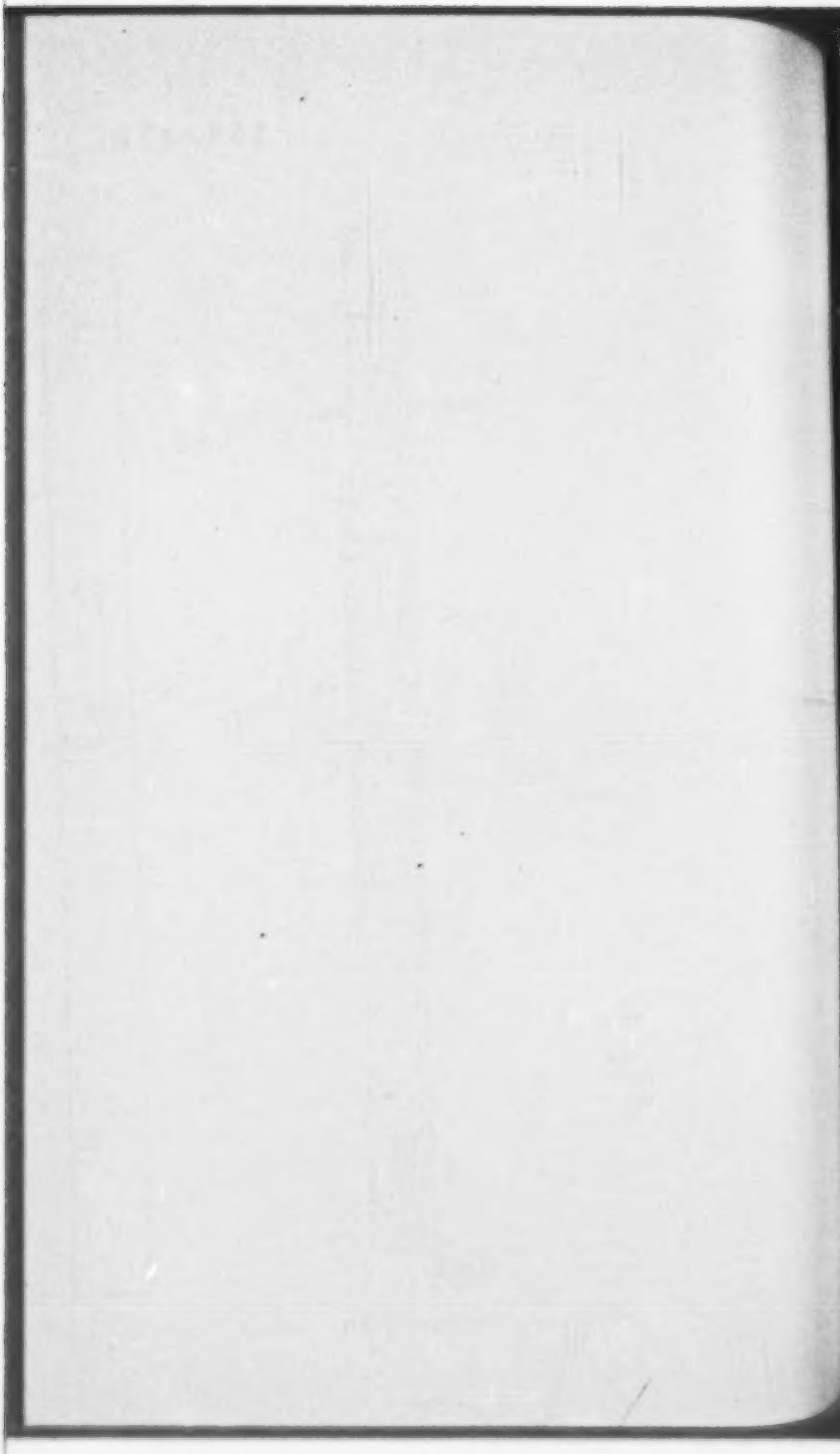


Fig. 2.



169—170.



At a regular term of the United States Circuit Court of Appeals for the Seventh Circuit begun and held in the United States Court Room in the city of Chicago in said Seventh Circuit on the fifth day of October, 1926, of the October Term, in the year of our Lord one thousand nine hundred and twenty-six and of our Independence the one hundred and fifty-first

And afterwards, to wit: On the thirtieth day of June, 1927, there was filed in the office of the clerk of this court an appearance of counsel for appellees, which said appearance is in the words and figures following, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT, OCTOBER TERM, 1926

No. 3935

SANITARY REFRIGERATOR COMPANY, Appellant,

vs.

ALEXANDER F. WINTERS et al.

The clerk will enter my appearance as counsel for the appellees.

Frank E. Liverance, Jr., #221-224 Houseman Bldg., Grand Rapids, Mich.

Endorsed: Filed June 30, 1927. Edward M. Holloway, Clerk.

And afterwards, to wit: On the fifth day of July, 1927, there was filed in the office of the clerk of this court an appearance of counsel for appellant, which said appearance is in the words and figures following, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT, OCTOBER TERM, 1926

No. 3935

SANITARY REFRIGERATOR COMPANY, Appellant,

vs.

ALEXANDER F. WINTERS et al., Appellees

The clerk will enter my appearance as counsel for the appellant.

E. Hayward Fairbanks, #1232 Chestnut Street, Phila., Pa.

Endorsed: Filed July 5, 1927. Edward M. Holloway, Clerk.

At a regular term of the United States Circuit Court of Appeals for the Seventh Circuit begun and held in the United States Court Room in the city of Chicago in said Seventh Circuit on the fourth day of October, 1927, of the October Term, in the year of our Lord one thousand nine hundred and twenty-seven and of our Independence the one hundred and fifty-second

And afterwards, to wit: On the third day of January, 1928, the following further proceedings were had and entered of record, to wit:

Tuesday, January 3, 1928.

Court met pursuant to adjournment and was opened by proclamation of crier.

Present: Hon. Samuel Alschuler, Circuit Judge, presiding; Hon. Evan A. Evans, Circuit Judge; Hon. George T. Page, Circuit Judge; Hon. Albert B. Anderson, Circuit Judge; Edward M. Holloway, Clerk; Palmer E. Anderson, Marshal.

Before Hon. Samuel Alschuler, Circuit Judge; Hon. Evan A. Evans, Circuit Judge; Hon. George T. Page, Circuit Judge

3935

SANITARY REFRIGERATOR COMPANY

vs.

ALEXANDER F. WINTERS et al.

Appeal from the District Court of the United States for the Eastern District of Wisconsin

It is ordered by the court that this cause be, and the same is hereby set down for hearing on Wednesday, January 11, 1928.

And afterwards, to wit: On the eleventh day of January, 1928, the following further proceedings were had and entered of record, to wit:

Wednesday, January 11, 1928.

Court met pursuant to adjournment and was opened by proclamation of crier.

Present: Hon. Samuel Alschuler, Circuit Judge, presiding; Hon. Evan A. Evans, Circuit Judge; Hon. George T. Page, Circuit Judge; Edward M. Holloway, Clerk; Palmer E. Anderson, Marshal.

3935

SANITARY REFRIGERATOR COMPANY

vs.

ALEXANDER F. WINTERS et al.

Appeal from the District Court of the United States for the Eastern District of Wisconsin

Now this day come the parties by their counsel and this cause now comes on to be heard on the printed record and briefs of counsel, and on oral arguments by Mr. E. Hayward

Fairbanks, counsel for appellant, and by Mr. Frank E. Liverance, Jr., counsel for appellees, and the court having heard the same takes this matter under advisement.

An afterwards, to wit: On the ninth day of February, 1928, there was filed in the office of the clerk of this court, the opinion of the court, which said opinion is in the words and figures following, to wit:

IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT, OCTOBER TERM, 1927, JANUARY SESSION, 1928

No. 3935

SANITARY REFRIGERATOR COMPANY, Appellant,

vs.

ALEXANDER F. WINTERS and BASIL R. CRAMPTON, Appellees

Appeal from the District Court of the United States for the Eastern District of Wisconsin

Before Alschuler, Evans, and Page, Circuit Judges

February 9, 1928.

EVANS, C. J.:

A patent, No. 1,385,102, to Winters and Crampton issued July 19, 1921, covering a latch, was the basis of the instant suit. Seven claims are involved, two of which (5th and 6th) are broad, generic claims, while the other five (1, 2, 3, 4, and 7) are narrow, specific claims.

The District Court sustained all claims and found appellant to be an infringer thereof. Thereafter appellees brought suit upon this same patent in the District Court for the eastern district of Pennsylvania and the court there held that claims five and six of the patent were invalid and the other five claims were not infringed by latches similar to the ones made by appellant.

Counsel, with commendable frankness, have made concessions in this court which greatly narrow the contro-

verted issues. Appellant admits the validity of claims, 1, 2, 3, 4, and 7, while appellees concede that claims 5 and 6 are invalid. The sole issue remaining, in view of these concessions, is one of infringement of the five valid claims. The concession that these five claims are valid was accompanied by the statement that validity was recognized only in view of an asserted construction which gave to each claim so narrow a field that infringement was not disclosed.

The inventor said:

"This invention relates to a latch of the swinging lever type, particularly adapted for use on refrigerators though applicable in many other relations where a door is to be closed and held in closed position. The swinging lever latch, or as it is better known, the Condit latch, is pivotally connected at one end to the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertently swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other. A further object of the invention is to construct a latch of few parts, whereby it may be economically made and which will be durable and efficient in service."

Two typical claims are one and seven, herewith quoted:

1. "In combination, a door and casing therefor, a keeper attached to the casing comprising a base, an outstanding post and a head at the outer portion of the post, said head

depending below the post and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member attached to the door comprising a base, an integral outstanding post projecting from the base and a laterally extending arm at the upper end of the post paralleling the base, and a latch lever pivotally mounted between its ends between the said arm and base of said member, said lever having one arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper, a handle portion extending in the opposite direction from the pivot and another arm projecting from the handle portion a distance from the pivot and lying substantially at right angles to the first arm of the lever and likewise being formed with an inner cam side, substantially as and for the purposes described.

7. "In combination, a door and a casing therefor, a keeper attached to the casing, a latch lever pivotally mounted on the door between its ends, one end of the lever being formed into an operating handle and the other into a keeper engaging arm, a second arm projecting from the handle portion of the lever a short distance from its pivot and at an angle to the first arm, said keeper being formed at its outer sides for engagement with the respective arms when the lever is in horizontal and vertical positions, respectively, as the door is closed, to automatically operate the lever so that it will engage under the keeper when the door is entirely closed, substantially as described."

While appellee conceded that claims five and six were invalid in view of the prior art, we would have no hesitancy in so finding in the absence of this admission.

Whether the other claims are infringed depends entirely upon the position of the patent in suit in the art. No difficulty would be experienced in finding infringement if the patent were a pioneer or was one covering such an improvement as entitled it to a broad range of equivalency. But the patent does not occupy any such position. It is an extremely narrow one as a reading of the claims at once discloses. Moreover, the record shows a prior art loaded with latches possessing some of the features of appellee's latch.

Describing appellee's latch, counsel say:

"The latch is attached to the door of the refrigerator and the keeper for the latch is attached to the door jam. * * * The swinging latch of the patent in suit is an automatic latch acting to close and tightly close when the door is moved to shut it irrespective of the position the latch lever may have whether horizontal or level."

The prior art as disclosed by the Kiel patent No. 564,448, the Dent patent No. 67,506, and Charles patent No. 702,185, the Schrader patents No. 1,117,709 and 1,170,685, the War patent No. 1,250,736, all refute the contention of asserted novelty, in the location of the keeper upon the door jam and the lever upon the door or in providing for the automatic closing of the door without regard to the position of the lever. It may be true that in some of these disclosures because of the law of gravity the lever invariably takes but one position.

In the Dent patent the keeper was attached to the casing while the member carrying the latch lever was attached to the door. In the Charles latch the keeper was on the door while the other member was on the casing. The Keil latch had its keeper on the casing and the latch member on the door. Each structure, examples of which are in evidence, works automatically when the door is slammed shut whether the latch lever is in a horizontal or a vertical position.

It follows, therefore, that a patentable novelty, if any exists, is restricted to the particular structure disclosed. What, then, is the novel structure?

In nearly all of the cited prior art structures, the keeper member has a curved post against which a portion of the level strikes when the door is swung. Patentees (Claim 1) describe this portion of the keeper as "an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower outer sides coming substantially to a point." The keeper described in the Kiel patent is decidedly similar. The differences between appellees' lever latch and the prior art structures are more pronounced. Automatic operation is dependent upon the cooperation of the latch and the keeper. Consequently there naturally follow differences in the

structural design of one member due to difference in structure of the other member. We repeat then that patentable novelty resides in the structural differences of the latches (either in the keeper member or the latch member or in both), that the claims are narrow and their validity is conceded. Our operation of the physical exhibits discloses a basis for the concession of validity. But it is this narrow field and nothing more which the inventor possessed when he secured his patent.

As thus analyzed, limited, and explained, are the claims infringed by appellant's latch?

Appellant's structure has a keeper and a latch member located similarly to the appellees'. But it contends that both its keeper and its latch member differ from those of the patent. Its keeper does not have (so it says) "an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point" nor does its latch lever have one "arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper." It supplies its keeper with a lug on the inner or door side and its latch lever is supplied with an arm extending from the pivot of the latch member but such arm does not engage "the depending portion of the keeper. Rather is it so constructed and so angled as to come in contact with the lug on the head of the keeper. It is this contact between the lug and the arm on the latch which causes the latch to automatically swing and lock when the door is slammed. Appellant's keeper, though supplied with "a head formed with upper and lower curved outer sides coming substantially to a point" does not, as in the patent in suit, make use of the curved upper sides to direct the movement of the latch when the door is shut. If the arm on its lever extended a little further it would contact with the upper curved outer side portion of the head of the keeper.

The precise question then is, does appellant avoid infringement by placing a lug on the near side of the head of its keeper, the surface of which is curved similarly to the outer surface of its head and which is adapted to contact with the arm projecting from the handled portion of its lever?

Concede the existence of claims that are narrow and restricted to structural design only, yet even in suih claims there must be some range of equivalency.

Perhaps the expression "range of equivalency" is not a happy one nor does it describe the thought as accurately as it should. Instead, it would doubtless be better to say that a valid claim should rarely, if ever, have its language construed with absolute literacy. While a valid, narrow claim will be strictly construed, it by no means follows that its terms and expressions should be limited to a hard and fast, unbending definition. Rather must the language of each claim be defined in the light of the meaning given it by the patentee, with an appreciation of the purpose and object of the element in the patented structure. To illustrate. Patentee speaks of a keeper with its base, its post, and its head. The latter member is described as having "upper and lower curved outer sides coming substantially to a point." In our effort to ascertain whether infringement occurred, we must define the head as well as the "sides of the head." Is the outside of appellant's lug a part of the side of the head of the keeper? Certainly it is a part of the head and, in the light of the mechanics of the entire structure, the purpose it serves, we conclude that it is a part of the *side* of the head.

The decree is modified in so far as it sustains the validity of claims five and six of the patent in suit and enjoins the infringement of said claims five and six and to the extent that appellant is directed to account for its gains and profits due to the infringement of said claims five and six. Otherwise the decree is affirmed. The costs in this court shall be divided equally between the parties.

And on the same day, to wit: On the ninth day of February, 1928, the following further proceedings were had and entered of record, to wit:

Thursday, February 9, 1928.

Court met pursuant to adjournment and was opened by proclamation of crier.

Present: Hon. Samuel Alschuler, Circuit Judge, presiding; Hon. Evan A. Evans, Circuit Judge; Edward M. Holloway, Clerk; Palmer E. Anderson, Marshal.

Before Hon. Samuel Alschuler, Circuit Judge; Hon. Evan A. Evans, Circuit Judge; Hon. George T. Page, Circuit Judge

3935

SANITARY REFRIGERATOR COMPANY

vs.

ALEXANDER F. WINTERS and BASIL R. CRAMPTON

Appeal from the District Court of the United States for the Eastern District of Wisconsin

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Eastern District of Wisconsin and was argued by counsel.

On consideration whereof, It is now here ordered, adjudged and decreed by this court that the decree of the said District Court in this cause is modified in so far as it sustains the validity of claims 5 and 6 of the patent in suit and enjoins the infringement of said claims 5 and 6, and to the extent that appellant is directed to account for its gains and profits due to the infringement of said claims 5 and 6; otherwise the said decree be, and the same is hereby affirmed.

It is further ordered that the costs in this court shall be divided equally between the parties.

And afterwards, to wit: On the twenty-eighth day of February, 1928, there was filed in the office of the clerk of this court a Petition for a Rehearing, which said Petition for a Rehearing is not copied here.

And afterwards, to wit: On the sixth day of March, 1928, the following further proceedings were had and entered of record, to wit:

Tuesday, March 6, 1928.

Court met pursuant to adjournment and was opened by proclamation of crier.

Present: Hon. Samuel Alschuler, Circuit Judge, presiding; Hon. Evan A. Evans, Circuit Judge; Hon. George T. Page, Circuit Judge; Edward M. Holloway, Clerk; Palmer E. Anderson, Marshal.

3935

SANITARY REFRIGERATOR COMPANY

vs.

A. F. WINTERS and B. R. CRAMPTON

Appeal from the District Court of the United States for the Eastern District of Wisconsin

It is ordered by the court that the petition for a rehearing in this cause be, and the same is hereby denied.

And afterwards, to wit: On the eighth day of March, 1928, the following further proceedings were had and entered of record, to wit:

Thursday, March 8, 1928.

Court met pursuant to adjournment.

Present: Hon. George T. Page, Circuit Judge; Edward M. Holloway, Clerk; Palmer E. Anderson, Marshal.

3935

SANITARY REFRIGERATOR COMPANY

vs.

ALEXANDER F. WINTERS et al.

Appeal from the District Court of the United States for the Eastern District of Wisconsin

On motion of counsel for appellant, it is now here ordered that the mandate of this court heretofore issued in this cause, be and the same is hereby recalled and stayed until the further order of this court.

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT

I, Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit, do hereby certify that the foregoing typewritten pages, numbered from 1 to 10, inclusive, contain a true copy of the proceedings had and papers filed (except the briefs of counsel and the petition for a rehearing) in the case of Sanitary Refrigerator Company, appellant, vs. Alexander F. Winters and Basil R. Crampton, appellees, No. 3935, October Term, 1927, as the same remains upon the files and records of the United States Circuit Court of Appeals, for the Seventh Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States Circuit Court of Appeals for the Seventh Circuit, at the City of Chicago, this Twelfth day of March, A. D. 1928.

Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit. (Seal United States Circuit Court of Appeals, Seventh Circuit.)

[fol. 185] SUPREME COURT OF THE UNITED STATES

ORDER REVOKING ORDER DENYING CERTIORARI—Oct. 15, 1928

On consideration of the petition for rehearing filed herein,

It is now here ordered by this Court that the said petition be, and the same is hereby, granted. The order entered October 8, 1928, denying the petition for a writ of certiorari herein is revoked, and a writ of certiorari in this cause is granted.

[fol. 186] SUPREME COURT OF THE UNITED STATES

ORDER ALLOWING CERTIORARI—Filed October 15, 1928

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Seventh Circuit is granted. And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

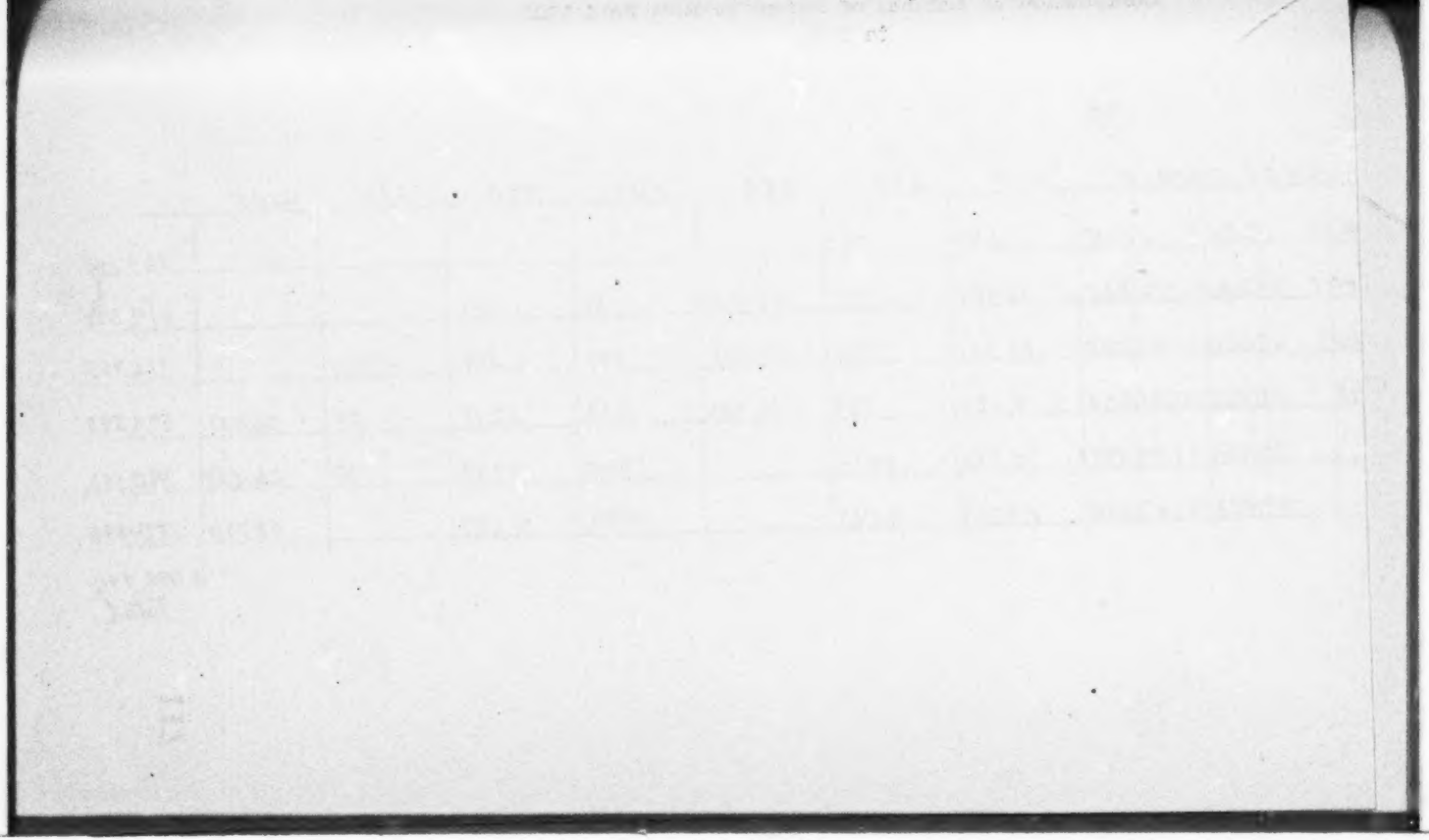
Endorsed on cover: File No. 33,429. U. S. Circuit Court of Appeals, 7th Circuit. Term No. 128. Sanitary Refrigerator Co., Petitioner, vs. Alexander F. Winters and Basil R. Crampton. Petition for writ of certiorari and exhibit thereto. Filed May 8th, 1928. File No. 33,429.

FOLD OUT IS TOO LARGE TO BE FILMED

PLAINTIFF'S EXHIBIT H.

Latches of Patent in Suit Sold 1921 to 1926.

	375	387	500	720	385	395	
40	740						169,745
85	1,744	42,912	151	114			319,348
17	288	41,398	404	574	324		366,985
36	764	12,724	613	2,218	24	34,037	474,593
16	1,313		505	2,493	30	66,055	390,182
54	4,585		479	2,223		48,770	374,898
							2,095,746 Total



DEFENDANT'S EXHIBIT No. 2.

U. S. Patent No. 670,506 to H. H. Dent.

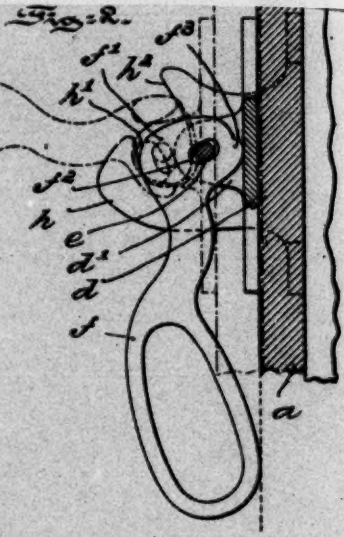
506.

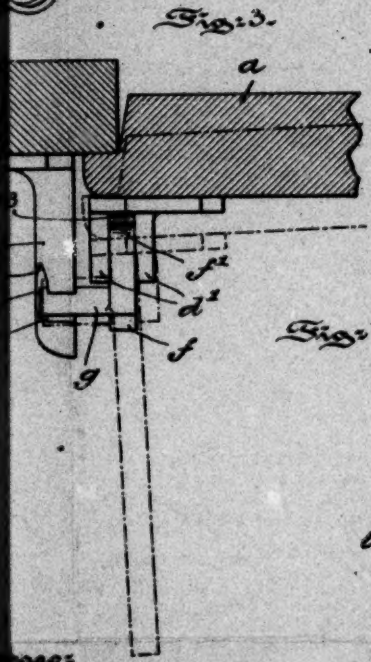
Patented Mar. 26, 1901.

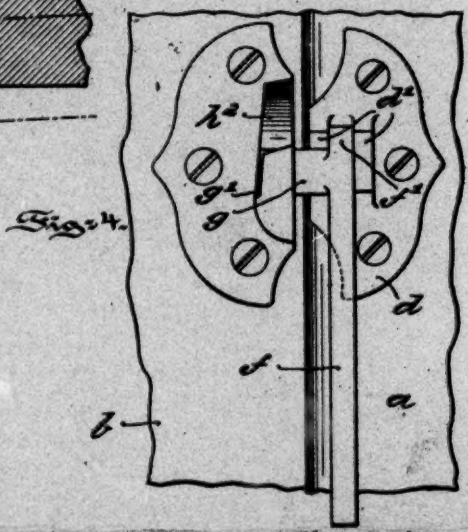
H. H. DENT

LATCH.

FOLD OUT IS TOO LARGE TO BE FILMED







Witnesses:

Inventor:
Henry H. Dent,

UNITED STATES PATENT OFF

HENRY H. DENT, OF ALLENTOWN, PENNSYLVANIA, ASSIGNO
DENT HARDWARE COMPANY, OF FULLERTON, PENNSYLV

LATCH.

SPECIFICATION forming part of Letters Patent No. 670,506, dated March 2
Application filed November 28, 1900. Serial No. 37,078. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. DENT, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Latches, of which the following is a specification.

My invention has relation to that class of door closers and openers wherein a pivoted lever or latch is provided with a lug or stud adapted to engage in a keeper to force the door tightly shut when operated in one direction and to start the door open when moved in the opposite direction, and in such connection it relates to the construction of the lever or latch its fulcral support, and the keeper for the latch.

The principal objects of my invention are, first, to so pivot the lever or latch in the plate or seat supporting the same that in the act of clamping the door to its seat strain upon the pin or bolt forming the pivot or fulcrum is removed, and, second, to so fashion the keeper that in the opening of the door and before disengagement of the latch from the keeper the door is pried open by the movement of the latch within the keeper.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a perspective view of a latch and its keeper embodying main features of my invention, the same being disengaged from the door and the door jamb or seat. Fig. 2 is a vertical sectional view of the latch and adjacent parts, showing in full and dotted lines the operative and inoperative positions of the lever-fastener of my invention for refrigerator and other doors. Fig. 3 is a top or plan view of the latch and keeper, with the door and jamb illustrated in cross-section; and Fig. 4 is a front elevational view of Fig. 3.

Referring to the drawings, *a* represents the lever *f* has a cam or eccentric
tween studs *d'* and provided with
arranged slot f^2, through which
e passes to unite the lever or
plate *d*. On the inner face of
f' is formed an auxiliary cam *f*
the latch or lever *f* is pressed
press inwardly against the base
d, as illustrated in Fig. 2. Up
portion or face of the cam *f'* is
erally-projecting lug *g*, adapted
recess *g'* of the keeper *h*. The
provided with two oppositely-arr
h' and h^3, of which one, *h'*, is conc
the seat for the lug *g* and the ot
wardly and forwardly made to
in the path of the lug *g* when th
vated out of the seat in the wing
illustrated in dotted lines in Fig.
ings.

The operation of the device
When the door is pushed shut,
depressed to force the lug *g* int
of the wing *h'*. When now the le
further depressed, the cam *f'* of
is forced inward by the weight *h'* o
and by reason of the slotted con
the pin or bolt *e* is permitted to
upon the plate *d* of the door *a*.
thus be tightly jammed into its
strain upon the pivot *e* of the lat
the door *a* is to be opened, the latch
upward until the lug *g* strikes up
h^3, when the door will be initia
forced open by the impingement
upon the said wing. By pulling
lever *f* the door will then come
and without any oblique pressur
door while in its seat.

Having thus described the nat
jects of my invention, what I cla
and desire to secure by Letters Pa

1. A lever or latch provided w
ally-projecting lug and a cam on it
vided with a slot, a keeper, wher

upport for the lever in said plate, all so that when the lug engages the nd the cam bears against the plate, n upon the pivot is relieved, substan- and for the purposes described.

a fastening device of the character d, a plate provided with two project- s, a lever provided with a cam or body between said studs and bearing upon te, said body being slotted, and a pin through the studs and the slot of said body to form the fulcral support for the lever in the studs, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

HENRY B. DENT.

Witnesses:
CHAS. E. SHECKLER,
ALEX. N. ULRICH.

DEFENDANT'S EXHIBIT No. 4.

U. S. Patent No. 554,448 to H. F. Keil.

(No Model.)

H. F. KEIL.

LATCH.

No. 554,448. Patented Feb. 11, 1896.

Fig. 1.

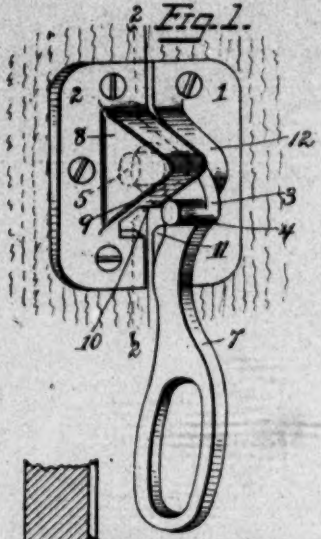


Fig. 6.

Fig. 5.

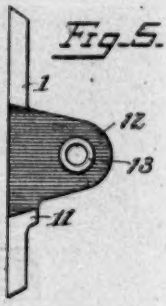


Fig. 2.

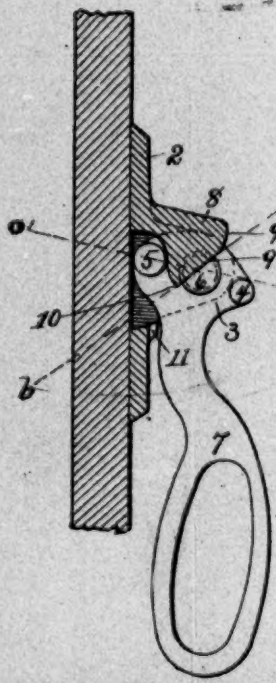


Fig. 3.

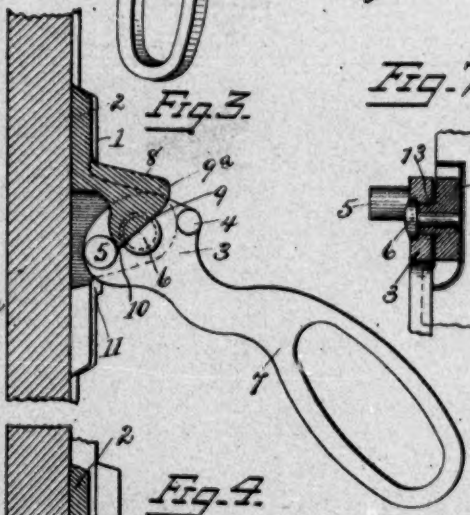


Fig. 7.

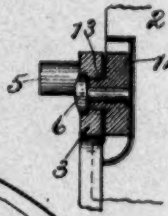
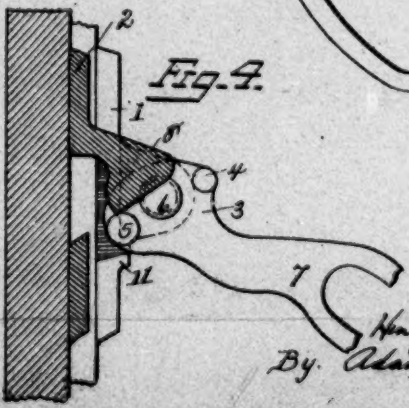


Fig. 4.



WITNESSES.

Albert Popking.

Henry C. Dieterich

INVENTOR.

Henry F. Keil

By Adam b. Schatz

Attorney

UNITED STATES PAT

HENRY FRANCIS KEIL, OF NEW

LATCH.

SPECIFICATION forming part of Letters Patent No. 55

Application filed November 15, 1895. Serial No. 6

To all whom it may concern:

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States of America, and a resident of New York city, in the county and State of New York, have invented a new and useful Improvement in Door Closing and Opening Devices, of which the following is a specification.

This invention relates to that class of door clamps and openers in which a lever having suitable studs to engage a keeper is utilized to force a door tightly to its seat when moved in one direction and to start or "pry" the door open when moved in the other direction, this type of invention being particularly adapted for refrigerator or other doors which require an absolutely-tight closure.

The object of my invention is to produce a simple device of the type mentioned, one which is certain in operation, of small cost, and which will both clamp and start the door in a direct horizontal plane without tendency to move the door in any direction other than that for which its hinges provide.

To this end my invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the complete device as applied to a door and door-casing. Fig. 2 is a vertical section in the plane of line 2 2 of Fig. 1, the parts being shown in the position when the door is locked. Fig. 3 is a similar view when the door is about to be clamped shut, the parts having also very nearly this position when the door is to be started from its seat. Fig. 4 is a similar view when the door has been entirely released from its clamped position and is ready to be swung open on its hinges. Fig. 5 is a detail view of the plate and lug for supporting the pivot of the handle-lever. Fig. 6 is a detail view of the head of the lever carrying the pins or studs. Fig. 7 is a section through the upper end of the lever and its support.

The plate 1, adapted to be attached to the door, is provided with a stud 12, having a cylindrical bearing 13 for the head 3 of the le

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Fig. 3. A do
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In Fig. 2 the
how far I pref

LATCH.

Patented Feb. 11, 1896.

Fig. 1.

Fig. 5.

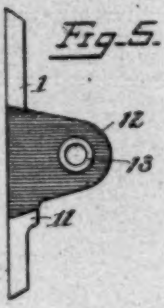


Fig. 7.

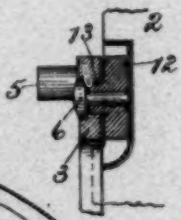


Fig. 3.

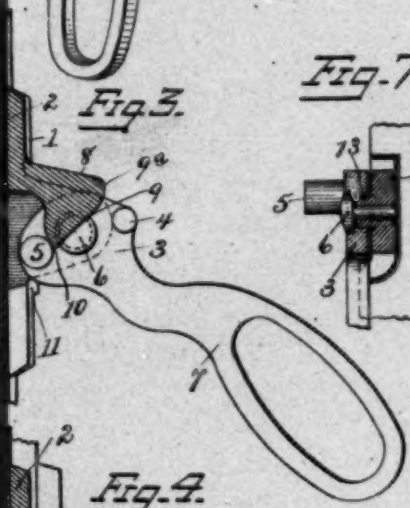
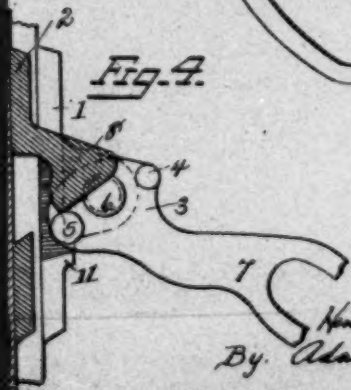


Fig. 4.



INVENTOR.

Henry F. Keil

By Adam C. Schatz

Attorney

UNITED STATES PATENT OFFICE.

HENRY FRANCIS KEIL, OF NEW YORK, N. Y.

LATCH.

SPECIFICATION forming part of Letters Patent No. 554,445, dated February 11, 1896.

Application filed November 15, 1895. Serial No. 569,052. (No model.)

To all whom it may concern:

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States of America, and a resident of New York city, in the county and State of New York, have invented a new and useful Improvement in Door Closing and Opening Devices, of which the following is a specification.

This invention relates to that class of door clamps and openers in which a lever having suitable studs to engage a keeper is utilized to force a door tightly to its seat when moved in one direction and to start or "pry" the door open when moved in the other direction, this type of invention being particularly adapted for refrigerator or other doors which require an absolutely-tight closure.

The object of my invention is to produce a simple device of the type mentioned, one which is certain in operation, of small cost, and which will both clamp and start the door in a direct horizontal plane without tendency to move the door in any direction other than that for which its hinges provide.

To this end my invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the complete device as applied to a door and door-casing. Fig. 2 is a vertical section in the plane of line 2 2 of Fig. 1, the parts being shown in the position when the door is locked. Fig. 3 is a similar view when the door is about to be clamped shut, the parts having also very nearly this position when the door is to be started from its seat. Fig. 4 is a similar view when the door has been entirely released from its clamped position and is ready to be swung open on its hinges. Fig. 5 is a detail view of the plate and lug for supporting the pivot of the handle-lever. Fig. 6 is a detail view of the head of the lever carrying the pins or studs. Fig. 7 is a section through the upper end of the lever and its support.

The plate 1, adapted to be attached to the door, is provided with a stud 12, having a cylindrical bearing 13 for the head 3 of the lever 7, which is pivoted on said bearing and held thereon by a rivet or bolt 6, said lever having two studs or pins 4 and 5 projecting from the pivotal point and parallel with the axis of the pivot and nearly diametrically opposite each other, the pin 5 being preferably larger than the pin 4.

The plate 2, which is adapted to be attached to the door-casing, is provided with a nosing or keeper 8 having its under face inclined, as at 9, the outer end of this incline terminating in a substantially perpendicular face at the tip 9^a. The keeper 8 at its base back of the incline 9 is undercut to form a recess for the reception of the lever-pin 5, the edge wall of this recess being preferably cam-shaped, as at 10. By "cam-shaped" I mean that the wall 10 of the recess is not concentric with the center of the pivot-pin 6 when the door is shut or nearly so.

At 11 is indicated a shoulder or stop to limit the inward movement of the lever 7, as shown most clearly in Fig. 2.

In operation, when the door is pushed inward the pin 5 rides down the incline 9 of the keeper, as indicated in Fig. 4, and automatically lifts the handle end of the lever and finally assumes about the position shown in Fig. 3. A downward and inward push on said handle causes the pin 5 to ride up over the cam 10 to the position shown in Fig. 2, and thus firmly clamps the door in its casing. When the door is to be opened, an outward pull of the handle first carries the parts back to a position where the pin 4 will engage the lower part of the substantially perpendicular face 9^a, the pin 5 being at the same time carried down below the cam 10. Further movement in this direction carries the pin 4 up over and to a slight degree along the face 9^a, and thus forces or "pries" the door outward from its seat in a direct horizontal plane. It will be understood that if the incline 9 were continued to the tip of the keeper the pin 4 would strike said incline, and the movement of the lever in an outward direction would tend to force the door downward and jam it against the sill of the casing.

In Fig. 2 the line $a\ a$ is drawn to indicate how far I prefer to locate the pin 4 below the line of the centers of pivot 6 and pin 5, and I will now explain the reason for this location. In the first place the plane of movement of pivot 6 should be such as to intersect the in-

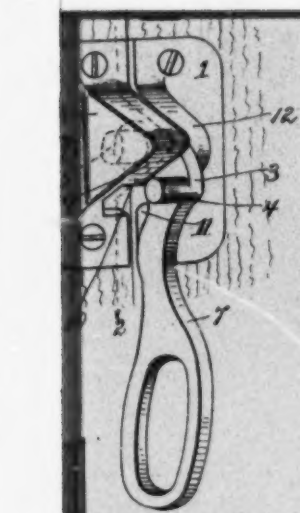


Fig. 5.

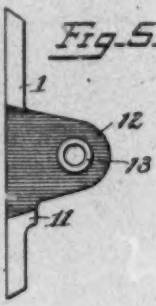


Fig. 7.

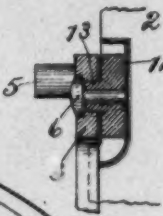


Fig. 3.

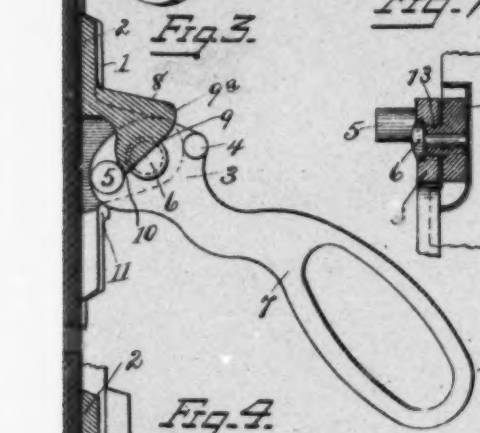
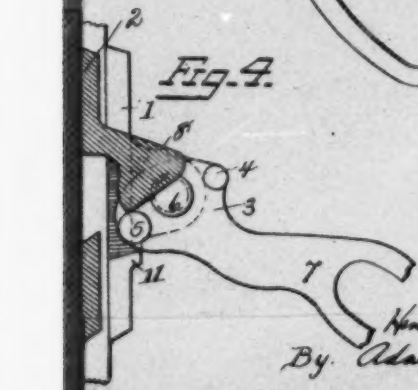


Fig. 4.



INVENTOR.
Henry F. Keil
By Adam B. Schatz
Attorney

HENRY FRANCIS KEIL, OF NEW YORK, N. Y.

LATCH.

SPECIFICATION forming part of Letters Patent No. 554,448, dated February 11, 1896.

Application filed November 15, 1895. Serial No. 569,052. (No model.)

To all whom it may concern:

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States of America, and a resident of New York city, in the county and State of New York, have invented a new and useful Improvement in Door Closing and Opening Devices, of which the following is a specification.

This invention relates to that class of door clamps and openers in which a lever having suitable studs to engage a keeper is utilized to force a door tightly to its seat when moved in one direction and to start or "pry" the door open when moved in the other direction, this type of invention being particularly adapted for refrigerator or other doors which require an absolutely-tight closure.

The object of my invention is to produce a simple device of the type mentioned, one which is certain in operation, of small cost, and which will both clamp and start the door in a direct horizontal plane without tendency to move the door in any direction other than that for which its hinges provide.

To this end my invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the complete device as applied to a door and door-casing. Fig. 2 is a vertical section in the plane of line 2 2 of Fig. 1, the parts being shown in the position when the door is locked. Fig. 3 is a similar view when the door is about to be clamped shut, the parts having also very nearly this position when the door is to be started from its seat. Fig. 4 is a similar view when the door has been entirely released from its clamped position and is ready to be swung open on its hinges. Fig. 5 is a detail view of the plate and lug for supporting the pivot of the handle-lever. Fig. 6 is a detail view of the head of the lever carrying the pins or studs. Fig. 7 is a section through the upper end of the lever and its support.

The plate 1, adapted to be attached to the door, is provided with a stud 12, having a cylindrical bearing 13 for the head 3 of the lever 7, which is pivoted on said bearing and held thereon by a rivet or bolt 6, said lever having two studs or pins 4 and 5 projecting laterally from the head 3 on opposite sides of the pivotal point and parallel with the axis of the pivot and nearly diametrically opposite each other, the pin 5 being preferably larger than the pin 4.

The plate 2, which is adapted to be attached to the door-casing, is provided with a nosing or keeper 8 having its under face inclined, as at 9, the outer end of this incline terminating in a substantially perpendicular face at the tip 9^a. The keeper 8 at its base back of the incline 9 is undercut to form a recess for the reception of the lever-pin 5, the edge wall of this recess being preferably cam-shaped, as at 10. By "cam-shaped" I mean that the wall 10 of the recess is not concentric with the center of the pivot-pin 6 when the door is shut or nearly so.

At 11 is indicated a shoulder or stop to limit the inward movement of the lever 7, as shown most clearly in Fig. 2.

In operation, when the door is pushed inward the pin 5 rides down the incline 9 of the keeper, as indicated in Fig. 4, and automatically lifts the handle end of the lever and finally assumes about the position shown in Fig. 3. A downward and inward push on said handle causes the pin 5 to ride up over the cam 10 to the position shown in Fig. 2, and thus firmly clamps the door in its casing. When the door is to be opened, an outward pull of the handle first carries the parts back to a position where the pin 4 will engage the lower part of the substantially perpendicular face 9^a, the pin 5 being at the same time carried down below the cam 10. Further movement in this direction carries the pin 4 up over and to a slight degree along the face 9^a, and thus forces or "pries" the door outward from its seat in a direct horizontal plane. It will be understood that if the incline 9 were continued to the tip of the keeper the pin 4 would strike said incline, and the movement of the lever in an outward direction would tend to force the door downward and jam it against the sill of the casing.

In Fig. 2 the line *a a* is drawn to indicate how far I prefer to locate the pin 4 below the line of the centers of pivot 6 and pin 5, and I will now explain the reason for this location. In the first place the plane of movement of pivot 6 should be such as to intersect the incline 9 of the keeper at a point about or a little

below the center of that incline, in order that when the door is being closed the pin 5 will ride down the incline and then start up behind the keeper, and the angle of the incline should be about as shown by the line *b b* in Fig. 2, in order that the lever may automatically operate as just described. Now if the center of pin 4 was located on the line *c c* the said pin would strike the incline, when opening the door, before the pin 5 had passed down far enough to clear the lower end of the cam 10. Therefore the said pin 4 is located below the line *c c*, substantially as shown and described.

Having now described my invention, what I claim is—

In a door-latch, the combination of a keeper or hook having a substantially perpendicular face and inclining downwardly and rearwardly therefrom and provided with a recess back of said inclined portion, and a lever having a head provided with a stud 5 for engaging under the keeper in the recess thereof and a stud 4 for impinging on the said perpendicular face of the keeper, whereby the door is drawn outward directly in a line at right angles to its face and thereby prevent crowding of the door against the upper or lower part of the door-frame, said studs being parallel with the axis of the pivot of the lever.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of October, 1895.

HENRY FRANCIS KEIL.

Witnesses:
JOHN WERNER.
JAS. KATSCHE.

DEFENDANT'S EXHIBIT No. 5.

U. S. Patent No. 1,114,296 to T. O. Schrader.

T. O. SCHRADER.

LOCKING DOOR PULL.

APPLICATION FILED JULY 3, 1914.

1,114,296.

Patented Oct. 20, 1914

FIG. 1.

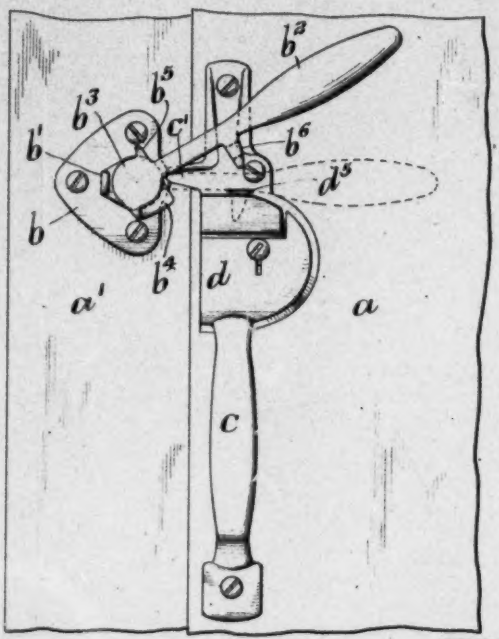


FIG. 2.

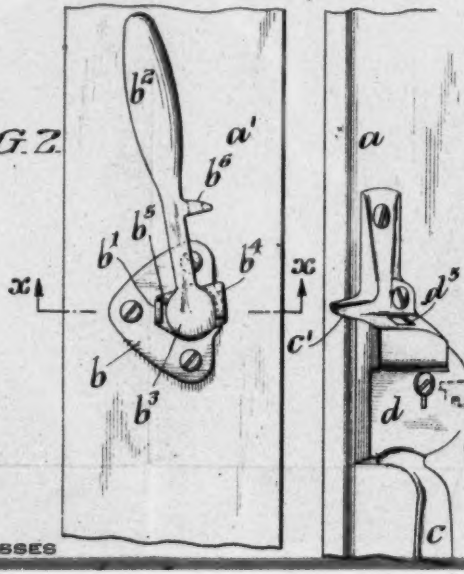


FIG. 3.

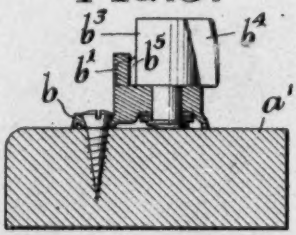
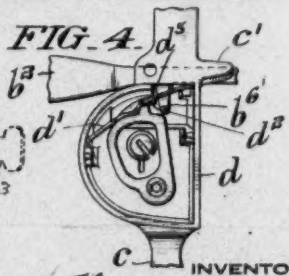


FIG. 4.



INVENTOR

Thomas O. Schrader

WITNESSES

UNITED STATES PATEN

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, HARDWARE COMPANY, OF FULLERTON, PENNSYLVA PENNSYLVANIA.

LOCKING DOOR-PULL.

1,114,296. Specification of Letters Patent.

Application filed July 3, 1914. Serial No. 848,

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Locking Door-Pulls, of which the following is a specification.

My invention relates to a lever handle and lock door-pull, for refrigerator and other doors arranged so that slamming the door causes the lever-handle to be operated to hold the door closed and at the same time permit by such act of the lever-handle being brought into such a position to permit manually then of the said handle being brought into connection with the lock of said door-pull to secure the door against opening until unlocked; and in such connection my invention relates to the constructive arrangement of the said defined device for the purpose explained.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of the lever-handle and lock door-pull for refrigerator and other doors embodying the essential main features of my said invention, showing the door in a closed position and the lever-handle in such position as to permit manually of engaging the lever-handle tongue with the lock member of the door-pull. Fig. 2, is a similar view of the side-frame of the door, showing the lever pivoted to a bracket removably applied to said frame and with a back-stop and with the hub of the lever-handle formed with an inclined cam and with a projection to engage the back-stop of the bracket to limit the range of movement in one direction of said lever-handle and the said lever-handle in one portion provided with a notched or re- projection to engage the lock of the secured to the Figs. 1 and 2. T vided in one part bracket has pivo handle b^2, provi formed as part o beyond the cam b arranged a proje b^1, of the bracket rection the rotary ver-handle b^2. T side is provided projection b^3, to door-pull c. The secured to the do integral part of t pull c, in the upp projection c^1, to en of the lever-handl slammed to and example, so as to illustrated in Fig. manually the notch b^4, of the lever-han the lock d, for exam 4, for then turning as illustrated in F leaf-spring d^1, be tongue d^2, so that has been permitted turning of the key will be maintained with the said keep

To operate the le the position to the may be caused to shown in Fig. 1, it the door. Then by movement downwar notched projection enter the aperture then in a position to trolled keeper-tongu gage the notched pro d^2, is turned in the secure the door pul

APPLICATION FILED JULY 3, 1914.

1,114,296.

Patented Oct. 20, 1914

FIG. 1.

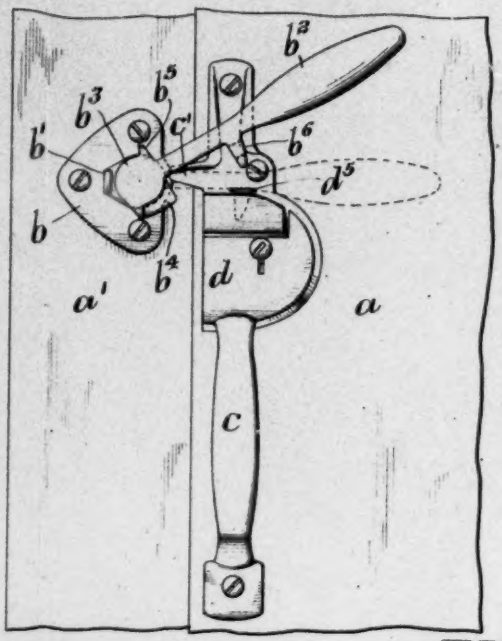
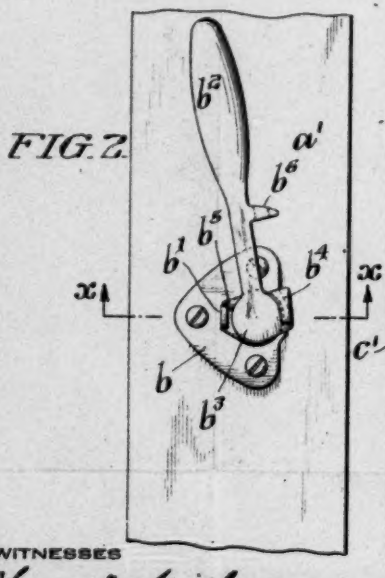


FIG. 2.



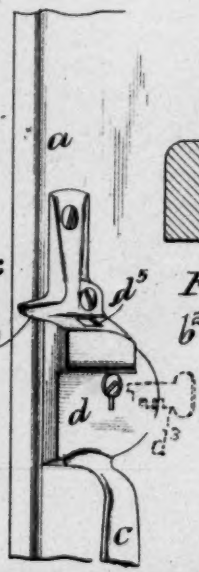


FIG. 3.

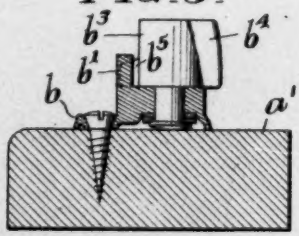
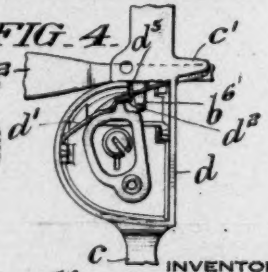


FIG. 4.



WITNESSES

Thomas M. Smith,

Rose E. Smith

INVENTOR

Thomas O. Schrader,

BY Walter Douglas

ATTORNEY

UNITED STATES PATENT

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCKING DOOR-PULL.

1,114,296. Specification of Letters Patent. Patented Oct. 20, 1914.

Application filed July 3, 1914. Serial No. 848,7

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Locking Door-Pulls, of which the following is a specification.

My invention relates to a lever handle and lock door-pull, for refrigerator and other doors arranged so that slamming the door causes the lever-handle to be operated to hold the door closed and at the same time permit by such act of the lever-handle being brought into such a position to permit manually then of the said handle being brought into connection with the lock of said door-pull to secure the door against opening until unlocked; and in such connection my invention relates to the constructive arrangement of the said defined device for the purpose explained.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of the lever-handle and lock door-pull for refrigerator and other doors embodying the essential main features of my said invention, showing the door in a closed position and the lever-handle in such position as to permit manually of engaging the lever-handle tongue with the lock member of the door-pull. Fig. 2, is a similar view of the side-frame of the door, showing the lever pivoted to a bracket removably applied to said frame and with a back-stop and with the hub of the lever-handle formed with an inclined cam and with a projection to engage the back-stop of the bracket to limit the range of movement in one direction of said lever-handle and the said lever-handle in one portion provided with a notched or recessed projection to engage the lock of the said door-pull. Fig. 3, is a transverse sectional view on the line x—x, of Fig. 2; and Fig. 4, is a central longitudinal sectional view through the lock of the door-pull, to the right, as shown in Fig. 2.

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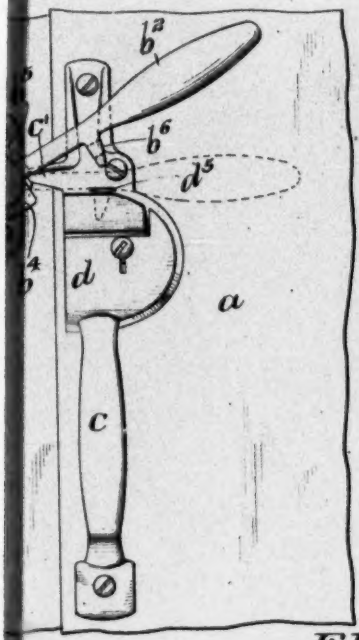
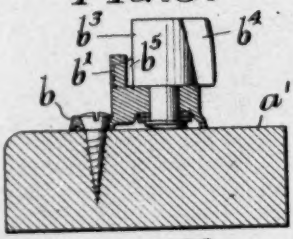


FIG. 3.



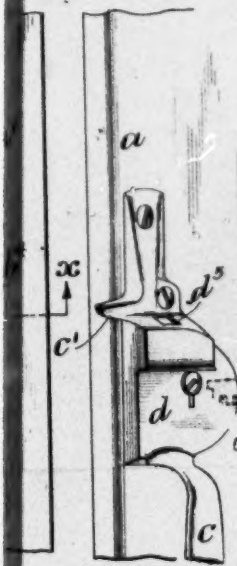
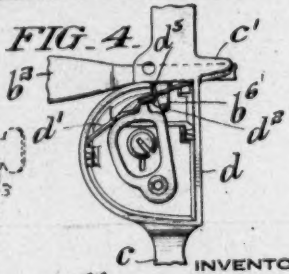


FIG. 4.



INVENTOR
Thomas O. Selander,
BY Walter Douglas
ATTORNEY

HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCKING DOOR-PULL.

1,114,296. Specification of Letters Patent. Patented Oct. 20, 1914.

Application filed July 3, 1914. Serial No. 848,761.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Locking Door-Pulls, of which the following is a specification.

My invention relates to a lever handle and lock door-pull, for refrigerator and other doors arranged so that slamming the door causes the lever-handle to be operated to hold the door closed and at the same time permit by such act of the lever-handle being brought into such a position to permit manually then of the said handle being brought into connection with the lock of said door-pull to secure the door against opening until unlocked; and in such connection my invention relates to the constructive arrangement of the said defined device for the purpose explained.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of the lever-handle and lock door-pull for refrigerator and other doors embodying the essential main features of my said invention, showing the door in a closed position and the lever-handle in such position as to permit manually of engaging the lever-handle tongue with the lock member of the door-pull. Fig. 2, is a similar view of the side-frame of the door, showing the lever pivoted to a bracket removably applied to said frame and with a back-stop and with the hub of the lever-handle formed with an inclined cam and with a projection to engage the back-stop of the bracket to limit the range of movement in one direction of said lever-handle and the said lever-handle in one portion provided with a notched or recessed projection to engage the lock of the said door-pull. Fig. 3, is a transverse sectional view on the line x—x, of Fig. 2; and Fig. 4, is a central longitudinal sectional view through the lock of the door-pull, to the right, as shown in Fig. 2.

Referring to the drawings a, is the door and a^1, is the frame against which the door is closed, as clearly illustrated in Fig. 1. A bracket b, is provided which is removably secured to the frame a^1, as illustrated in Figs. 1 and 2. The said bracket is also provided in one part with a projection b^1. This bracket has pivoted to it an angular lever-handle b^2, provided with a hub b^3, and formed as part of the hub is a cam b^4, and beyond the cam b^4, and as part of the hub is arranged a projection b^5, to engage the stop b^1, of the bracket b, so as to limit in one direction the rotary movement of the said lever-handle b^2. The lever-handle b^2, on one side is provided with a notched or recessed projection b^6, to engage the lock d, of the door-pull c. The door-pull c, is removably secured to the door a, and is formed as an integral part of the said lock d. The door-pull c, in the upper portion has a tapered projection c^1, to engage and ride the cam b^4, of the lever-handle b^2, when the door a, is slammed to and against the frame a^1, for example, so as to occupy the position as illustrated in Fig. 1, and in order that then manually the notched or recessed projection b^6, of the lever-handle b^2, may be forced into the lock d, for example, as illustrated in Fig. 4, for then turning the key d^3. The lock d, as illustrated in Fig. 4, is provided with a leaf-spring d^1, bearing against a keeper-tongue d^2, so that when the projection b^6, has been permitted to enter the lock d, by turning of the key d^3, the said projection will be maintained in locking engagement with the said keeper-tongue.

To operate the lever-handle b^2, occupying the position to the left in Fig. 2, so that it may be caused to assume the position as shown in Fig. 1, it is only necessary to slam the door. Then by a slight further manual movement downward of the lever-handle the notched projection b^6, will be permitted to enter the aperture d^5, of the lock d, and be then in a position to permit the spring controlled keeper-tongue d^2, of the lock to engage the notched projection b^6, when the key d^3, is turned in the lock d, so as thereby to secure the door pull against opening of the door.

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A device of the character described, comprising a lever-handle having a projection and a hub with a cam as part of the same, a door-pull having a tongue and a lock, said projection adapted to enter said

lock and said tongue adapted to engage said cam, substantially as and for the purposes described.

2. A device of the character described, comprising a lever-handle mounted in a bracket having a stop and a projection, a hub having an inclined cam and a back-stop and a door-pull with a tapered tongue and a lock, said projection adapted to enter said lock and said tongue adapted to engage said cam, substantially as and for the purposes described.

In witness whereof, I have hereunto set my signature in the presence of the two subscribing witnesses.

THOMAS O. SCHRADER.

Witnesses:
MABEL G. DAVIS,
CLARA SCHAADT.

DEFENDANT'S EXHIBIT No. 6.

U. S. Patent No. 1,117,709 to T. O. Schrader.

T. O. SCHRADER.

LATCH FOR DOORS.

APPLICATION FILED AUG. 8, 1914.

1,117,709.

Patented Nov. 17, 1914.

2 SHEETS—SHEET 1.

FIG. 1.

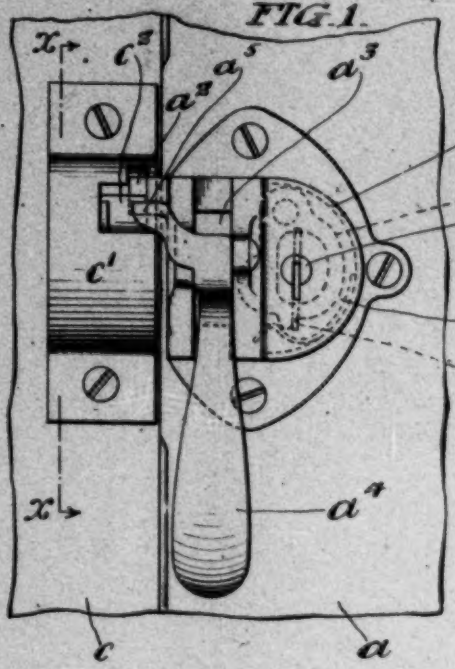


FIG. 2.

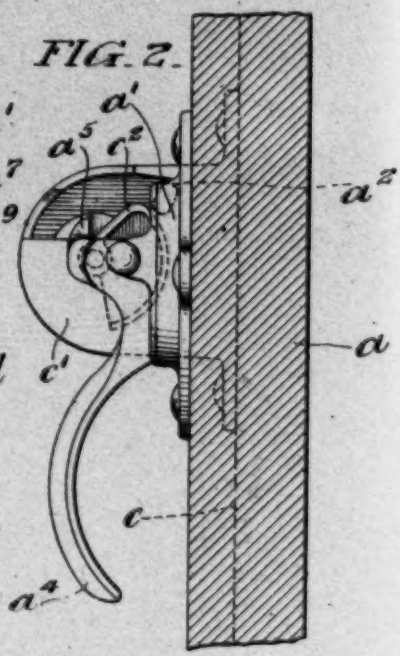
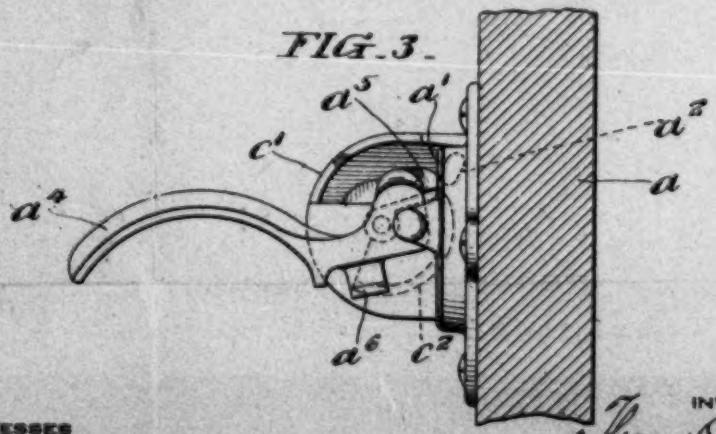


FIG. 3.



WITNESSES

Thomas M. Smith

Rosa E. Smith

INVENTOR

Thos. O. Schrader,

BY

L. Walter Douglas

T. O. SCHRADER.

LATCH FOR DOORS.

APPLICATION FILED AUG. 8, 1914.

1,117,709.

Patented Nov. 17, 1914.

2 SHEETS—SHEET 2.

FIG. 4.

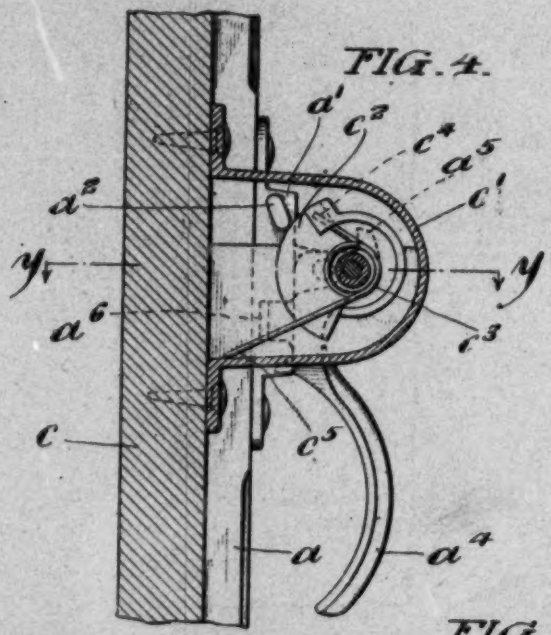


FIG. 5.

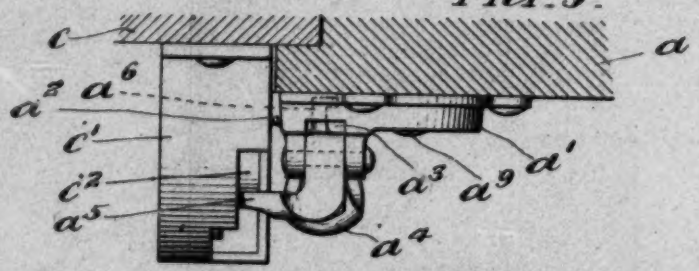
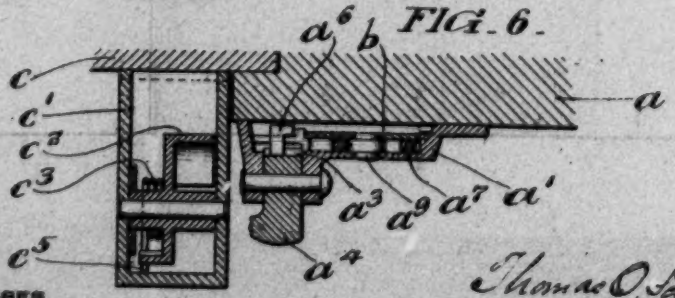


FIG. 6.



WITNESSES

Thomas M. Smith

INVENTOR

Thomas O. Schrader,

BY

Miller & Sprague

UNITED S

THOMAS O. SCHRADER, OF
HARDWARE COMPANY
PENNSYLVANIA.

1,117,709.

Appli

To all whom it may concern:

Be it known that I, THOM
a citizen of the United St
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Latches for Doors, of whi
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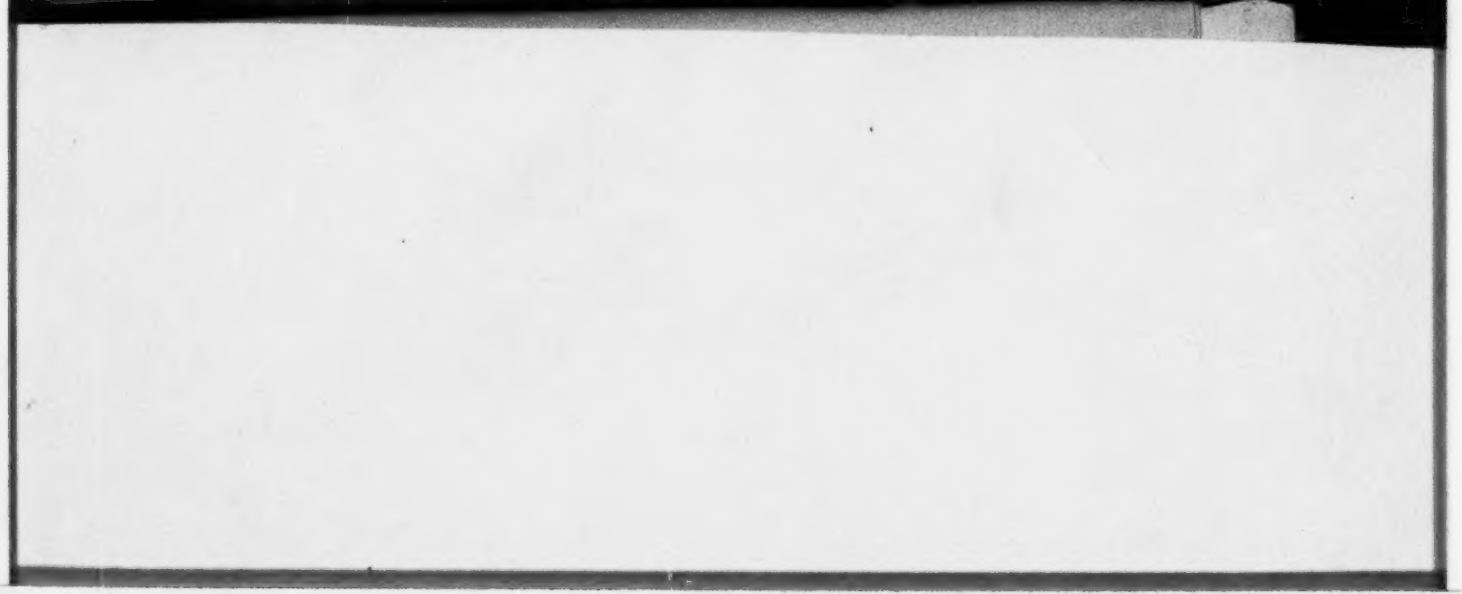


UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO THE DENT HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LATCH FOR DOORS.

1,117,709. Specification of Letters Patent. Patented Nov. 17, 1914.

Application filed August 6, 1914. Serial No. 855,795.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Latches for Doors, of which the following is a specification.

My invention has relation to a latch for doors, for closing refrigerators, among other uses therefor; and in such connection it relates to the particular constructive arrangement thereof, so that slamming the door fastens the same against release until the pull-handle thereof is operated.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of the latch-fastener for refrigerator and other doors, in an operative position, embodying essential main features of my said invention. Fig. 2, is a side elevational view of one of the members of the latch-fastener. Fig. 3, is a side elevational view of the pull-handle in a position to permit of release of the latch-fastener, to open the door. Fig. 4, is a vertical sectional view through the incased spring controlled shiftable cam of the latch-fastener, showing the tongue or projection of the housing for the pivotal pull-handle in an operative position and also said pull-handle in such position as to permit of the locking of the same. Fig. 5, is a top or plan view; and Fig. 6, is a transverse central sectional view through both members of the said latch-fastener.

Referring to the drawings *a*, is the door with a lock housing a^1, applied thereto and having a projection or tongue a^2. The housing is recessed at a^3, to pivotally support a pull-handle a^4, having a recessed flaring sidewise extending finger a^5, and underneath the handle it is provided with an inturned recessed foot a^6, to engage a keeper a^7, of a shiftable locking means *b*, mounted in the housing a^1. This means is provided with a key turning spindle and stud a^8, for shifting the keeper a^7, into contact with the inturned recessed foot a^6, of the pull-handle a^4, as clearly shown in Fig. 6, and while the said handle a^4, occupies a vertical depending position, for example, the position as shown in Figs. 1 and 2.

The door-jamb *c*, is provided with a side notched box-like casing c^1, for the mounting of a shiftable pivoted cam c^2, therein. This cam is provided with a coiled spring c^3 which is at one end c^4, connected with the cam and at the opposite end c^5 with the said casing c^1, as clearly shown in Fig. 4, so as to normally maintain the said cam in an operative position to be readily shifted against the tension of the spring c^3, by the tongue or projection a^2, contacting with the said cam by the slamming of the door *a*, causing the said tongue or projection thereby to slip over the surface of said cam to occupy the position in the casing c^1, as clearly shown in Fig. 4, thus holding the door securely fastened against release, until the pull-handle is elevated to depress sufficiently the said cam c^2, to enable the tongue or projection a^2, to ride back over the said cam, with the door ajar and with the pull-handle in a vertical depending position. When the latch-fastener occupies the position shown in Fig. 4, in which position the door is fastened against release, the pull-handle will be in a vertical depending position with the recessed foot a^6, of said handle registering with the keeper a^7, of the locking-means *b*, arranged alongside of the pull-handle a^4. Then by turning the key *d*, in the slotted spindle or stud a^8, of the locking-means *b*, the keeper a^7 thereof, will be shifted into contact with the recessed foot a^6 of the said pull-handle to prevent further movement thereof.

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

A latch-fastener for doors, comprising a housing having a tongue and a pivotally

supported pull-handle having a finger, a spring controlled shiftable cam mounted in a casing of the door-jamb and arranged to be actuated by said tongue to latch said door and by said finger through the actuation of said handle to release said door.

In witness whereof I have hereunto set my signature in the presence of two subscribing witnesses.

THOMAS O. SCHRADER.

Witnesses:
MABEL G. DAVIS,
CLARA SCHAADT.

DEFENDANT'S EXHIBIT No. 7.

U. S. Patent No. 1,170,685 to T. O. Schrader.

T. O. SCHRADER.

SAFETY LOCK LATCH FOR REFRIGERATOR DOORS.

APPLICATION FILED JULY 1, 1915.

1,170,685.

Patented Feb. 8, 1916.

Fig. 1.

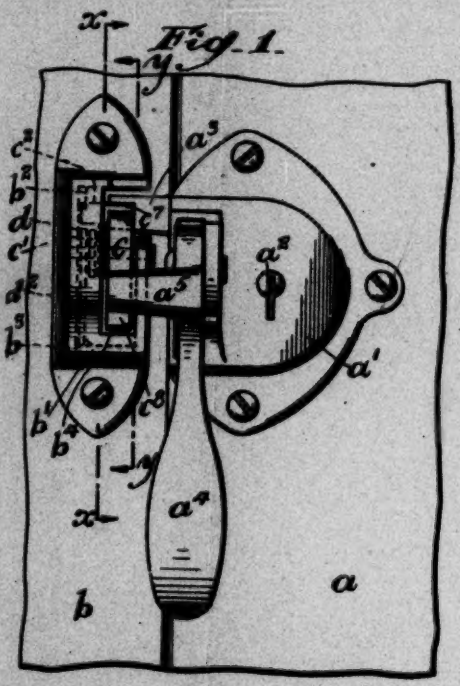


Fig. 2.

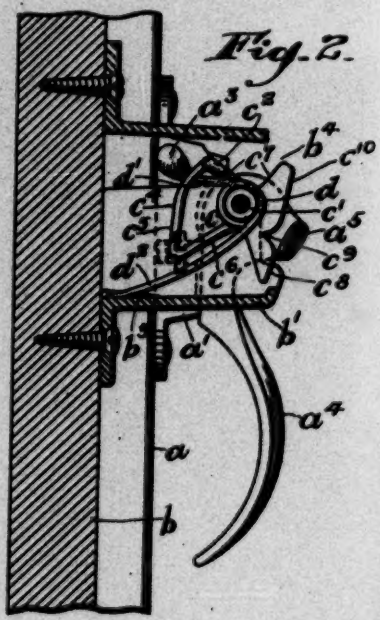


Fig. 3.

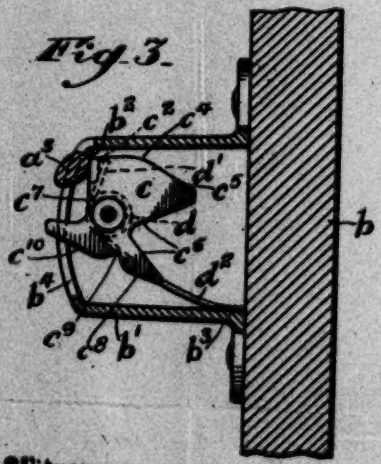
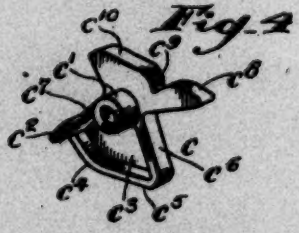


Fig. 4.



Witnesses

Thos. Rosemond.

Inventor

Thomas O. Schrader,

By

Walter Dunbar

Attorney

UNITED STATES PATENT

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, A
HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA
PENNSYLVANIA.

SAFETY LOCK-LATCH FOR REFRIGERATOR-D

1,170,685. Specification of Letters Patent. P

Application filed July 1, 1915. Serial No. 37,412.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Safety Lock-Latches for Refrigerator-Doors, of which the following is a specification.

My invention relates to a latch particularly adapted for use in connection with refrigerator-doors, of the type in which slamming the door against the door-jamb latches the door and turning then a key causes the engaged latch to be locked, but it has been found that when the key is turned which causes the latch to assume a locked condition, it is possible to insert a thin bar against one end of the cam-device to shift the same so as to enable the tongue of the lock-casing to clear the cam-device and thus to open the door, while the latch is still in a locked condition; and therefore, my present invention is designed to prevent just such defined act, by the provision of a peculiar form of cam-device held preferably under spring-tension and so arranged as that any attempt to release the tongue of the lock-casing as well as any attempt at manipulating the finger of the pivoted lever, will be prevented by the form of the said cam-device, when the latched door is in a locked condition.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of a latch fastener with the safety feature of my present invention, embodied therein. Fig. 2, is a view partly in vertical section on the line x, x of Fig. 1, and in side elevation of the pivoted operating lever of the said latch fastener. Fig. 3, is a view in vertical section on the line y, y of Fig. 1 and in side elevation of the spring controlled cam-device embodying particular features as constructively arranged of my said invention and with a lock-casing casing is provided a projecting tongu lever a^4, having a the lock arrangeme and for the operati is made to my Unit No. 1,117,709 of N showing an efficien with the type of la the particular featu tion.

The door-jamb b, ing b^1, having an ob top, and the said c door-jamb b. Inter provided a lug b^2, an vided a recess b^3, bo Fig. 3, for purposes fully explained.

The cam-device c, in the casing b. Thi formation, as clearly ing on one side a hu mounted a coiled sp terminals d^1 and d^2, c c^3, projecting from ab and in the recess b^3, One portion of the d hollowed out at c^3, the is curved at c^4 and rounded end and there an inverted V-shape a tially the same form at c^5, while the top is s across with the edge su having an intermediat them, as clearly shown the detail arrangement shown may be varied a sults be obtained, with the scope of my prese said device for the pur said lock-latch. With sa cam-device c, mounted clearly shown in Fig. 3, of the said device will ing lug b^2. The arran

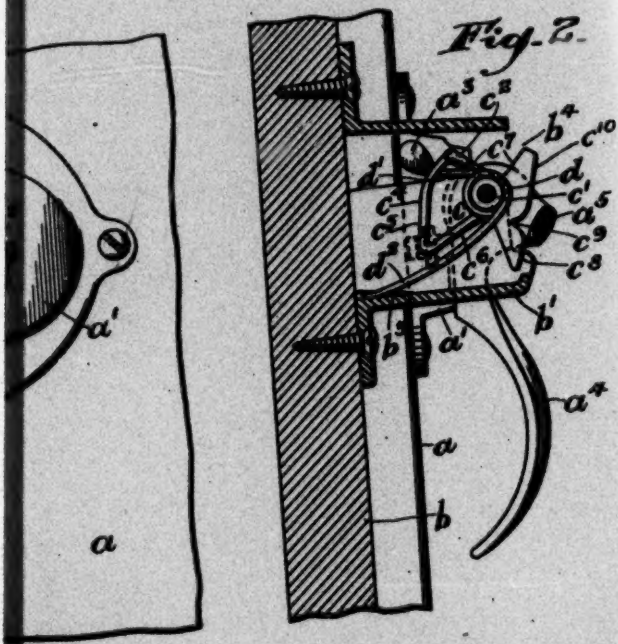
T. O. SCHRADER.

LOCK LATCH FOR REFRIGERATOR DOORS.

APPLICATION FILED JULY 1, 1915.

Patented Feb. 8, 1916.

Fig. 2.



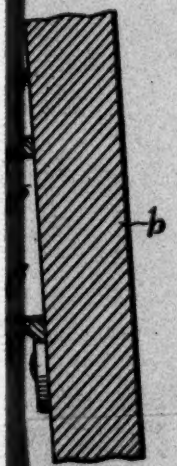
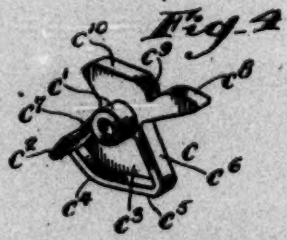


Fig. 4.



Inventor

Thomas O. Schrader,

By Walter Douglas

Atty

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO THE DENT HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

SAFETY LOCK-LATCH FOR REFRIGERATOR-DOORS.

1,170,685. Specification of Letters Patent. Patented Feb. 8, 1916.

Application filed July 1, 1915. Serial No. 37,412.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Safety Lock-Latches for Refrigerator-Doors, of which the following is a specification.

My invention relates to a latch particularly adapted for use in connection with refrigerator-doors, of the type in which slamming the door against the door-jamb latches the door and turning then a key causes the engaged latch to be locked, but it has been found that when the key is turned which causes the latch to assume a locked condition, it is possible to insert a thin bar against one end of the cam-device to shift the same so as to enable the tongue of the lock-casing to clear the cam-device and thus to open the door, while the latch is still in a locked condition; and therefore, my present invention is designed to prevent just such defined act, by the provision of a peculiar form of cam-device held preferably under spring-tension and so arranged as that any attempt to release the tongue of the lock-casing as well as any attempt at manipulating the finger of the pivoted lever, will be prevented by the form of the said cam-device, when the latched door is in a locked condition.

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with a lock-casing a^1, secured thereto. This casing is provided with a key-way a^2, with a projecting tongue a^3, and an operating lever a^4, having a projecting finger a^5, for the lock arrangement of the said casing a^1, and for the operation of the same, reference is made to my United States Letters Patent No. 1,117,709 of November 17th, 1914, as showing an efficient arrangement for use, with the type of latch-fastener embodying the particular features of my present invention.

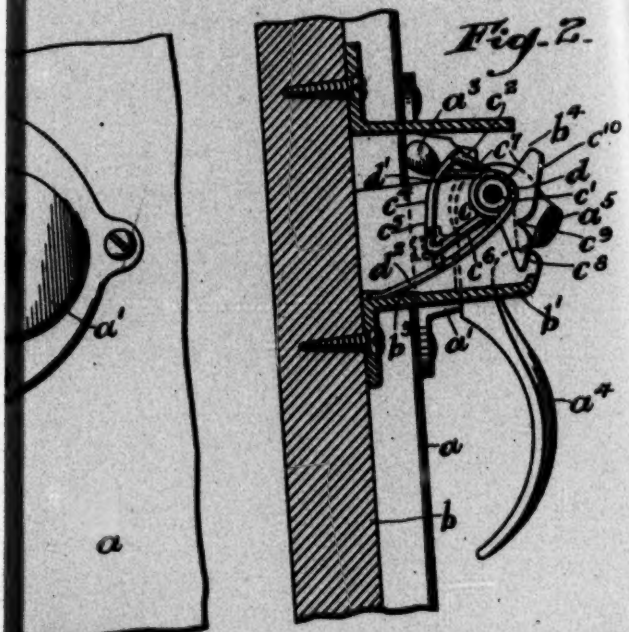
The door-jamb b, is provided with a casing b^1, having an oblong opening b^4, in the top, and the said casing is secured to the door-jamb b. Internally in one corner is provided a lug b^2, and in the bottom is provided a recess b^3, both as clearly shown in Fig. 3, for purposes to be presently more fully explained.

The cam-device c, is pivotally mounted in the casing b. This device is of peculiar formation, as clearly shown in Fig. 4, having on one side a hub c^1, around which is mounted a coiled spring d, the respective terminals d^1 and d^2, of which engage a lug c^2, projecting from about one corner thereof and in the recess b^3, of the said casing b^1. One portion of the device c, as shown, is hollowed out at c^3, the periphery in this part is curved at c^4 and inclined at c^5, to the rounded end and therefrom it is formed into an inverted V-shape at c^6, and is substantially the same form on the opposite side at c^7, while the top is substantially straight across with the edge surfaces c^8 and c^{10} and having an intermediate notch c^9, between them, as clearly shown in Fig. 4. However, the detail arrangement of the said device as shown may be varied and equally good results be obtained, without departing from the scope of my present invention of the said device for the purposes defined in the said lock-latch. With said spring controlled cam-device c, mounted in the casing b^1, as clearly shown in Fig. 3, normally the lug c^2, of the said device will bear against the casing lug b^2. The arrangement of the spring, as shown may be varied or omitted and still the cam-device be operative.

APPLICATION FILED JULY 1, 1915.

Patented Feb. 8, 1916.

Fig. 2.



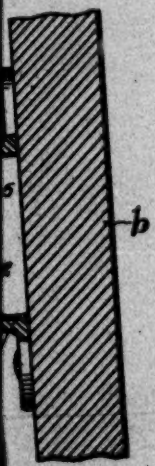


Fig. 4.

Inventor

Thomas A. Schrader,

J. Walter Douglass.

Attorney

Witness

Smith

HARDWARE COMPANY, OF ALLENTOWN, PENNSYLVANIA.

SAFETY LOCK-LATCH FOR REFRIGERATOR-DOORS.

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Referring to the drawings a, is the door with a lock-casing a^1, secured thereto. This casing is provided with a key-way a^2, with a projecting tongue a^3, and an operating lever a^4, having a projecting finger a^5, for the lock arrangement of the said casing a^1, and for the operation of the same, reference is made to my United States Letters Patent No. 1,117,709 of November 17th, 1914, as showing an efficient arrangement for use, with the type of latch-fastener embodying the particular features of my present invention.

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Slamming the door a, against the jamb b, will cause the tongue a^3, by the force exerted against the part c^7, of the device c, to move the same against the tension of the

spring d, to allow the tongue a^3, to move into such a position as to engage the upper portion of the surface c^7 of the said cam-device to hold the said tongue against shifting and thus the door in a closed position. Turning the key in the key-way a^5, causes the operating lever a^4, to be locked with relation to the engaged position of the tongue a^3, with the said device c, as clearly shown in Fig. 2. It will thus be observed that any attempt to shift the said cam-deivce from this position with the finger a^2, in contact with the part c^8, of said device will be prevented and likewise any movement of the tongue a^3, sufficiently to release it from its engagement with the said device to open the door. The surface c^{10}, of the cam-device c, is adapted when the latch is unlocked to contact with the finger a^2, of the operating lever a^4, which depresses the part c^{10}, of the said device c, to cause it to assume momentarily such a position under the tension of the spring d, as to enable release of the tongue a^3, from its engaged relation with the part c^7, of the said device c, to thus freely open the door a. If for any reason the spring d, under which the device c, is held in operative position, as above described should become broken or disarranged and the latched door be still locked, the arrangement of the device c is such, that it will still prevent opening the door, because any attempt at shifting the device will cause at the same time, the finger a^2, of the operating lever a^4 to engage the part c^8, of the said device, to prevent a movement to such an extent as to shift the said device c, or to release the tongue a^3, from contact with the part c^7, of said device so that thereby the foregoing arrangement provides a safety lock-latch fastener for a refrigerator or other door.

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a device of the character described, a lock-casing having a tongue, an operating lever having a finger, a casing and a spring controlled device mounted in said casing and having a cam-surface for said tongue to engage, to hold the door latched and an opposite contact-surface adapted to permit of the turning of said device in one position of movement of said finger and to prevent movement of said device in the other position of movement of said finger.

2. In a device of the character described, a lock-casing having a tongue, an operating lever having a finger, a casing having an oblong opening in the top and a spring controlled device mounted in said casing and having a cam-surface for said tongue to engage to hold the door latched and an opposite divided contact surface adapted to permit of the turning of said device in one position of movement of said finger and to prevent movement of said device in the other position of movement of said finger.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

THOMAS O. SCHRADER.

Witnesses:
MABEL G. DAVIS,
CLARA K. SCHAADT.

DEFENDANT'S EXHIBIT No. 8.

U. S. Patent 1,265,120 to T. O. Schrader.

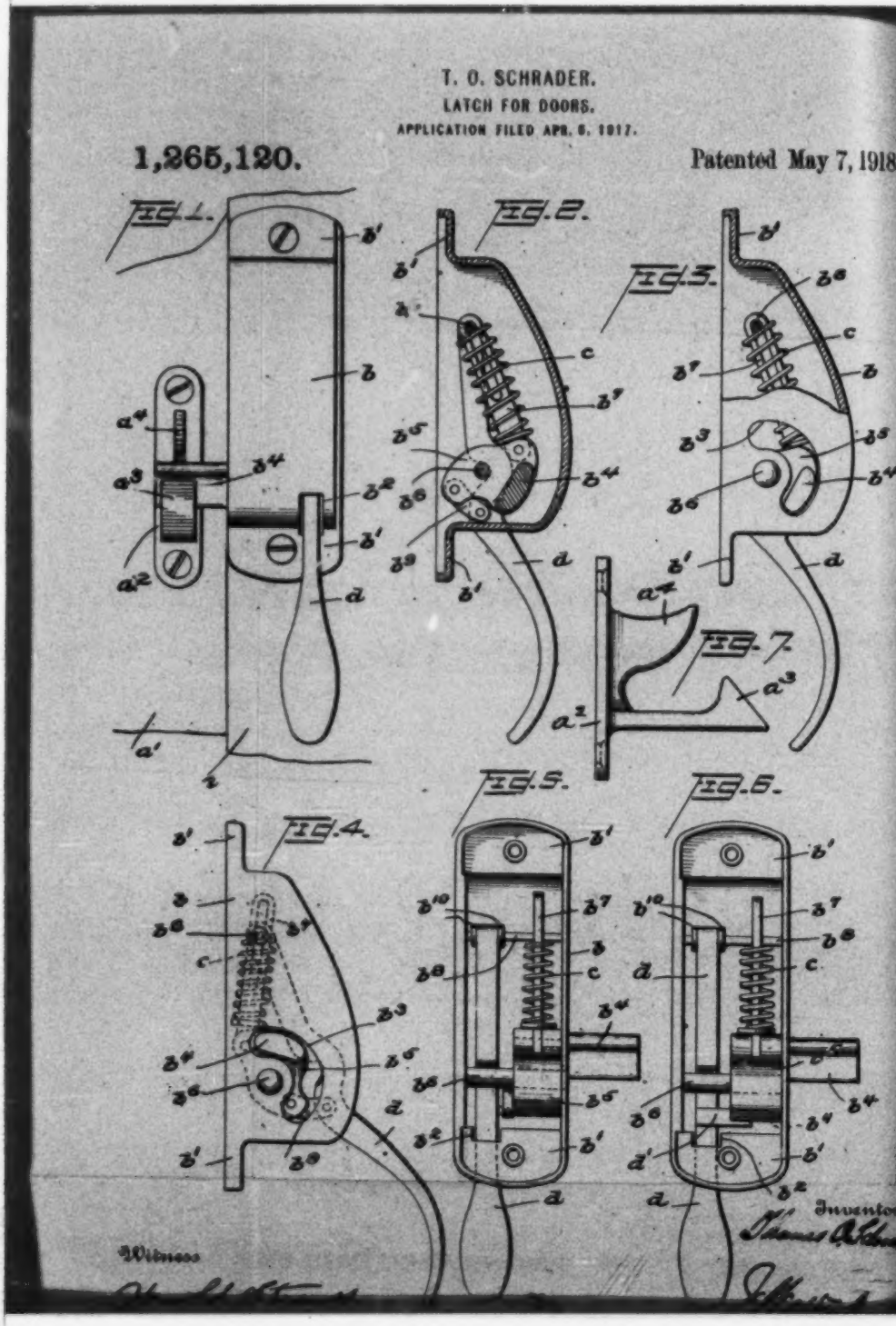
T. O. SCHRADER.

LATCH FOR DOORS.

APPLICATION FILED APR. 6, 1917.

1,265,120.

Patented May 7, 1918



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APPLICATION FILED APR. 6, 1917.

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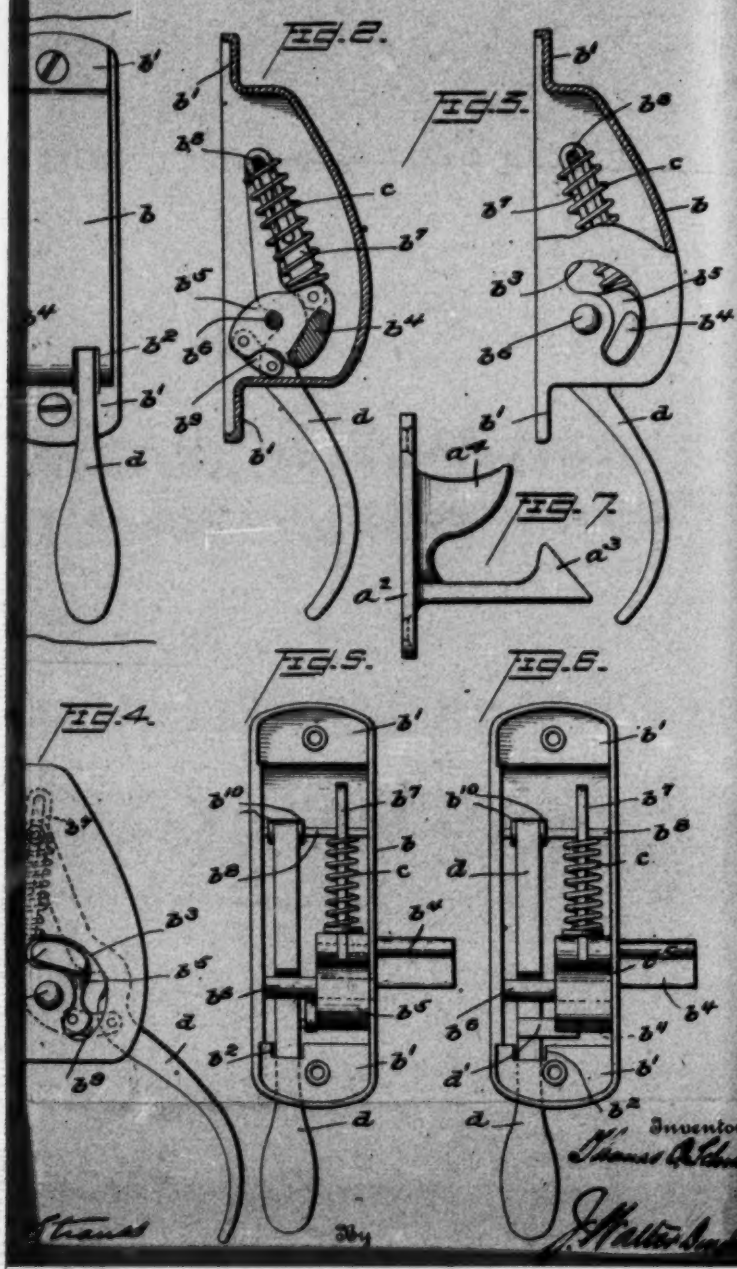

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO THE DENT HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LATCH FOR DOORS.

1,265,120. Specification of Letters Patent. Patented May 7, 1918.

Application filed April 6, 1917. Serial No. 160,121.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Latches for Doors, of which the following is a specification.

My invention has relation to a latch for closing refrigerator doors among other types of doors; and in such connection it relates to the particular constructive arrangement of the same.

The principal objects of my invention are first, to provide a latch with a bolt and an operating lever-handle to latch the door in either the raised or lowered position of the handle by manual pressure exerted against the door or simply slamming the same to thereby cause the bolt to snap into engagement with a keeper therefor; second to provide a latch in which the coiled spring thereof in the compressed condition of the same firmly holds the bolt of the latch so that by pressure exerted manually against the door the spring in expanding, will automatically cause the latch bolt to snap into engagement with the keeper to thus securely lock the door; and third, to provide a latch arranged so that the coiled spring thereof in the event of the spring becoming disarranged or broken, the operating lever-handle of the latch can be manipulated to either release or engage the latch bolt from or with the keeper to thus instantly open or close the door.

The nature and scope as well as characteristic features of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a front elevational view of a latch for a door, embodying the salient features of my invention.

Fig. 2, is a vertical sectional view through the incasement for a latch for a door of my said invention, showing the detail arrangement thereof.

Fig. 3, is a side elevational view partly in broken section, showing the latching member [illegible] through a slotted wall of the casing and the operating lever-handle for manipulating the said cam to thereby position the said latch, for the locking of the door.

Fig. 4, is a front end view of the incased latch, with the operating lever-handle, the latching member being shown in a shifted condition with the operating lever handle elevated, whereby upon pressure exerted against or slamming of the door the latch will snap under the keeper-head in the manner for example, as shown in Fig. 1.

Fig. 5, is a rear elevational view of the internal arrangement of the latching element and operating lever-handle.

Fig. 6, is a similar view of a slightly modified form of the operating lever-handle and latching member cam, in this instance provided with a recess for engaging the lug of said handle therein, for shifting said member; and

Fig. 7 is a side elevational view of the keeper, for the latching member.

Referring to the drawings *a*, is a door and a^1, a door frame surrounding the same. The frame a^1, is provided with a keeper a^2, having an inclining offset head a^3, and a rear projection forming a stop or rest a^4, for purposes to be presently explained. *b*, is an incasement provided with end base seats b^1 and b^1, for securing the same to the door *a*. The incasement is provided with a front oblong vertical slot b^2, and with a semi-circular slot b^3, in one of the side walls of the said incasement *b*, both of which slots are provided for purposes to be presently fully explained. The latching member b^4, projects through the semi-circular slot b^3, and is provided with a cam b^5, movably mounted on a spindle or pin b^6, fixed to the side walls of the casing *b*, as clearly shown in Fig. 5. To the forked portion of the cam b^5, is pivoted a slotted connecting rod b^7, carrying thereon a coiled spring *c*; the opposite end of said rod is mounted on a rear spindle or pin b^8, fixed to the side walls of the casing *b*, as clearly shown in Fig. 5. The coiled spring *c*, abuts at one end against the rear portion of the latch cam b^5, and at the opposite end against the spindle or pin b^8. The operating lever-handle *d*, in its preferably curved form extends through the vertical slot b^2, in the front of the casing *b*,

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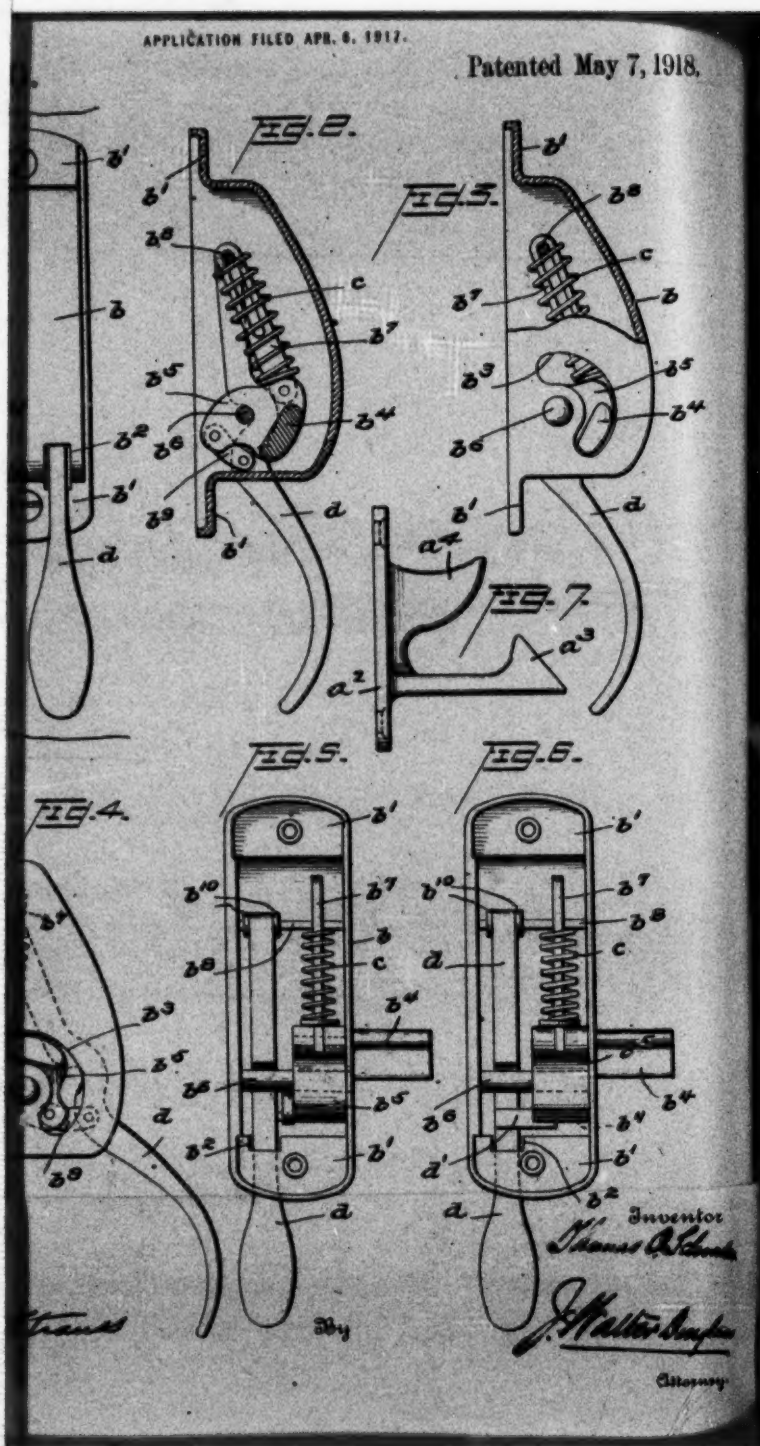

HARDWARE COMPANY, OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

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The principal objects of my invention are first, to provide a latch with a bolt and an operating lever-handle to latch the door in either the raised or lowered position of the handle by manual pressure exerted against the door or simply slamming the same to thereby cause the bolt to snap into engagement with a keeper therefor; second to provide a latch in which the coiled spring thereof in the compressed condition of the same firmly holds the bolt of the latch so that by pressure exerted manually against the door the spring in expanding, will automatically cause the latch bolt to snap into engagement with the keeper to thus securely lock the door; and third, to provide a latch arranged so that the coiled spring thereof in the event of the spring becoming disarranged or broken, the operating lever-handle of the latch can be manipulated to either release or engage the latch bolt from or with the keeper to thus instantly open or close the door.

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Fig. 2, is a vertical sectional view through the incasement for a latch for a door of my said invention, showing the detail arrangement thereof.

Fig. 3, is a side elevational view partly in broken section, showing the latching member extending through a slotted wall of the incasement therefor and the integral cam of the latching member and the coiled spring, the latter shown in an expanded condition and the operating lever-handle for manipulating the said cam to thereby position the said latch, for the locking of the door.

Fig. 4, is a front end view of the incased latch, with the operating lever-handle, the latching member being shown in a shifted condition with the operating lever handle elevated, whereby upon pressure exerted against or slamming of the door the latch will snap under the keeper-head in the manner for example, as shown in Fig. 1.

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as clearly shown in Fig. 1. The lever-handle d, is connected with the latch cam b^5, by means of a link b^9, for positively actuating the same and thus to provide a range of movement in substantially the arc of a circle through the slot b^3, of the incasement b, to permit of the setting and holding of the said member to the rear rest a^4 of the keeper-head for while in such position by slamming or pressing the door a, against the frame a^1, to cause the latching-member under compression of the spring c, to be released and snap in a forward direction from the said rest a^4, beneath the head a^3, of the keeper a^2. The latching-member as thus arranged can be manipulated for locking the door in either the lifted or lowered position of the handle d. Furthermore the latch-cam spring b^6, in its expanded position with the latching member b^4, engaged by the head a^3, of the keeper a^2, will hold the door a, in a tightly closed condition against the frame a^1.

The operating lever-handle d, is arranged as shown in Fig. 5, spanning the pin or spindle b^8, and on which the latch-cam b^5, is movably mounted. The extension of the handle d, is held in required alining relationship on the rear spindle or pin b^8, by means of a collar b^{10}, applied thereto, as clearly shown in Fig. 5. This handle is so arranged as to be adapted to release the latching member from its engagement with the keeper-head a^3, whether the cam spring is in a good working condition or not, by simply actuating the same in an upward direction which opens the door a; moreover, it is adapted due to its arrangement to force the door into an open position should the door become swollen or tightened from any cause, by simply manipulating the same, in a vertical direction.

The latch of Fig. 6 in constructive arrangement is the same as hereinbefore described, save that the latch-cam in this instance is formed with a deep recess b^{11}, and the operating lever-handle d, is provided with a side lug d^1, for engaging in said recess for thereby operating said cam and shifting the latching member an integral part of the said cam. In all other respects the latch is the same as illustrated in Figs. 1 to 5 inclusive.

Having described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The combination, in a latch, of a keeper and a cam having a bolt formed therewith and engaging said keeper, a cross-pin, a rod mounted on said pin and connected with said cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.

2. The combination in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, a cross-pin, a rod slidably mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.

3. The combination, in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, said cam provided with a recess, a cross-pin, a rod mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle having a lug arranged to engage the recess of said cam, and said handle pivotally connected with said pin, substantially as and for the purposes described.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

THOS. O. SCHRADER.

Witnesses:
MABEL G. DAVIS,
ELSIE V. LICHTY.

DEFENDANT'S EXHIBIT No. 9.

U. S. Patent No. 1,575,647 to T. O. Schrader.

March 9, 1926. 1,575,647

T. O. SCHRADER

LOCK DEVICE FOR REFRIGERATOR DOORS

Filed June 30, 1925

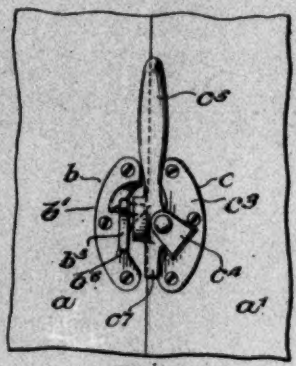


Fig. 1.

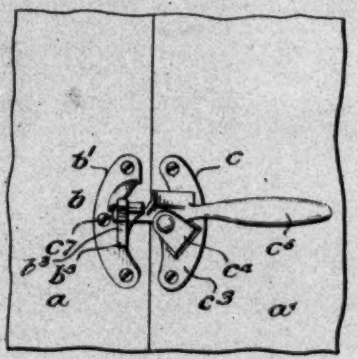


Fig. 2.

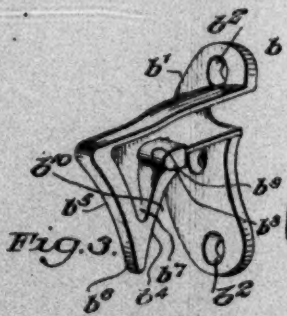


Fig. 3.

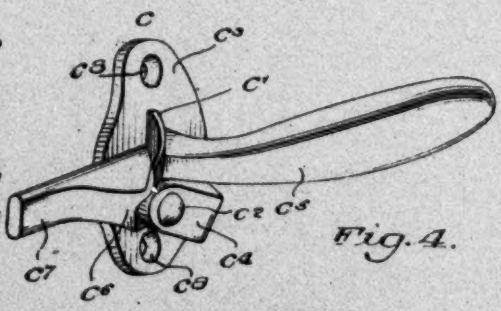


Fig. 4.

Fig. 5.

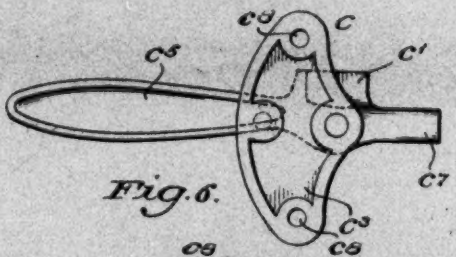


Fig. 6.

Fig. 7.

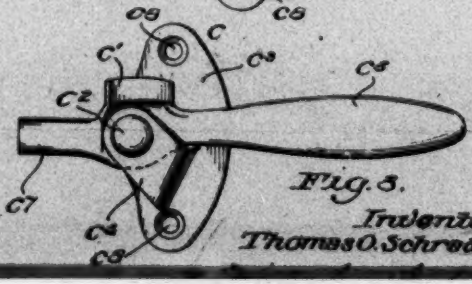
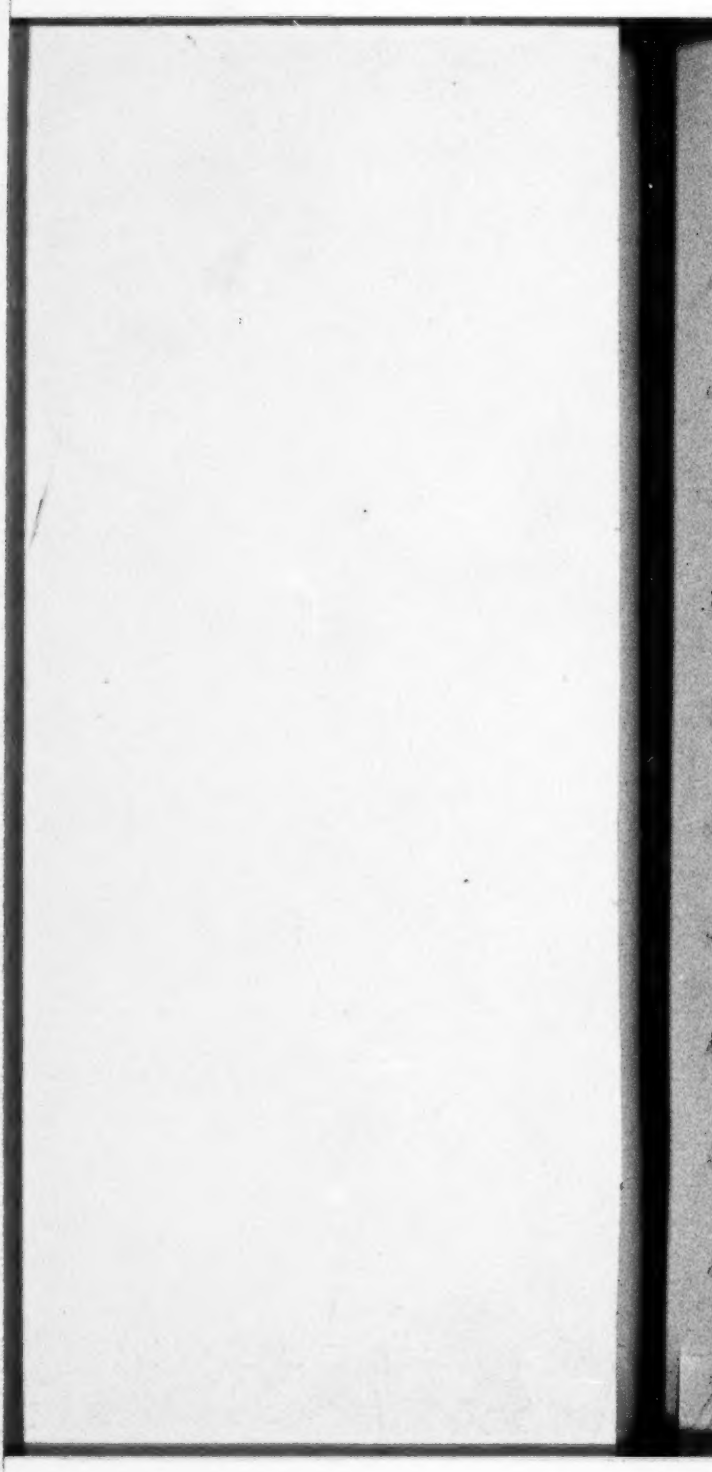


Fig. 8.

Inventor
Thomas O. Schrader.



Patented Mar. 9, 1926. 1,575,647

UNITED STATES PATENT OFFICE.

THOMAS O. SCHRADER, OF ALLENTOWN, PENNSYLVANIA, ASSIGNOR TO DENT HARDWARE CO., OF FULLERTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCK DEVICE FOR REFRIGERATOR DOORS.

Application filed June 30, 1925. Serial No. 40,474.

To all whom it may concern:

Be it known that I, THOMAS O. SCHRADER, a citizen of the United States, residing at the city of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a certain new and useful Lock Device for Refrigerator Doors, of which the following is a specification.

My invention relates to a locking device for refrigerator and other doors; and in such connection it relates more particularly to a locking device adapted to be operated by the slamming or quick closing of the door, thereby to cause an automatic and instantaneous engagement between a movable tongue member and a stationary keeper of said locking device.

In the employment of locking devices on refrigerators, it is desirable, as well as important, to provide a fastening device for such structures that can be readily and quickly manipulated to both open and to close the door thereof, and also to maintain said door tightly locked, in the closed position, yet nevertheless, in such a manner as to be capable of being easily released when required; and to the foregoing ends, my present invention has been particularly designed, with a view to simplicity of structure and operation for effecting not only quick opening of the door but also quick closing of the same.

My invention, stated in general terms, consists of a refrigerator locking device constructively arranged in substantially the manner hereinafter described and claimed.

The nature and characteristic features of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1 is a fragmentary view in elevation of refrigerator parts showing the same provided with a locking device embodying main features of my invention, with the door of the refrigerator shown in partly open position, and the locking device unlatched.

Figure 2 is a similar view showing the door in closed position and the locking device latched.

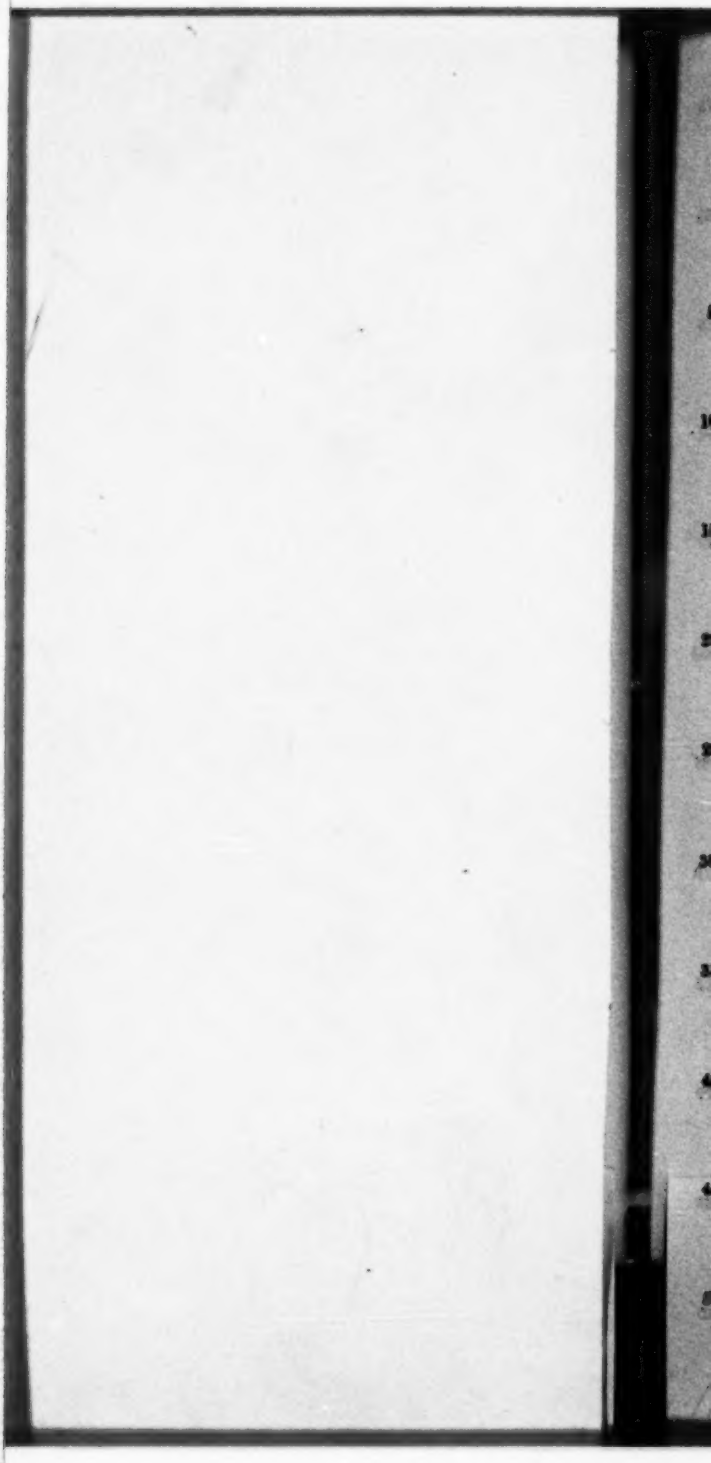
Figure 3 is a detail view in perspective of the keeper member and the locking member.

Figures 5 and 6 are respectively, rear end views of the keeper and tongue members of the automatically actuating refrigerator lock, defining the particular arrangement of the same, and

Figures 7 and 8 are similar views from the opposite side of the respective keeper and tongue members, showing the structural arrangement of the same.

For the purpose of illustrating my invention I have shown in the accompanying drawings several forms thereof which are at present preferred by me, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings the reference letter *a* designates a refrigerator structure and a^1 the door thereof. There is shown applied to the structure *a*, the keeper member *b*, of my invention, which in structural arrangement, consists of a baseplate b^1, formed with apertures b^2 for the reception of screws, to adapt the same for being secured in place, adjacent to the door opening. The keeper plate b^3 is formed integral with the base plate b^1 and projects upwardly therefrom at substantially a right angle thereto. The keeper plate b^3 is provided with the rear and front downwardly converging concaved edges b^4 and b^5 respectively; meeting in the downwardly projecting nose b^6. The keeper plate b^3 is hollowed out at b^7 on its inner side and is provided with a laterally projecting pin b^8, formed integral therewith and having the convexed front surface b^9, forming a riding surface for a cam c^1, of the locking member *c*, to be presently fully explained. The laterally projecting pin b^8 of the keeper plate b^3 serves to encounter a cam c^2 of the latch member *c* when the door



UNITED STATES PATENT OFFICE.

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In the employment of locking devices on refrigerators, it is desirable, as well as important, to provide a fastening device for such structures that can be readily and quickly manipulated to both open and to close the door thereof, and also to maintain said door tightly locked, in the closed position, yet nevertheless, in such a manner as to be capable of being easily released when required; and to the foregoing ends, my present invention has been particularly designed, with a view to simplicity of structure and operation for effecting not only quick opening of the door but also quick closing of the same.

My invention, stated in general terms, consists of a refrigerator locking device constructively arranged in substantially the manner hereinafter described and claimed.

The nature and characteristic features of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings forming part hereof, in which —

Figure 1 is a fragmentary view in elevation of refrigerator parts showing the same provided with a locking device embodying main features of my invention, with the door of the refrigerator shown in partly open position, and the locking device unlatched.

Figure 2 is a similar view with the locking device in latched position.

Figures 3 and 4 are respectively, enlarged, detached perspective views of the locking device of my present invention comprising the keeper member and the locking member.

Figures 5 and 6 are respectively, rear end views of the keeper and tongue members of the automatically actuating refrigerator lock, defining the particular arrangement of the same, and

Figures 7 and 8 are similar views from the opposite side of the respective keeper and tongue members, showing the structural arrangement of the same.

For the purpose of illustrating my invention I have shown in the accompanying drawings several forms thereof which are at present preferred by me, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings the reference letter a designates a refrigerator structure and a^1 the door thereof. There is shown applied to the structure a, the keeper member b, of my invention, which in structural arrangement, consists of a baseplate b^1, formed with apertures b^2 for the reception of screws, to adapt the same for being secured in place, adjacent to the door opening. The keeper plate b^3 is formed integral with the base plate b^1 and projects upwardly therefrom at substantially a right angle thereto. The keeper plate b^3 is provided with the rear and front downwardly converging concaved edges b^4 and b^5 respectively; meeting in the downwardly projecting nose b^6. The keeper plate b^3 is hollowed out at b^7 on its inner side and is provided with a laterally projecting pin b^8, formed integral therewith and having the convexed front surface b^9, forming a riding surface for a cam c^1, of the locking member c, to be presently fully explained. The laterally projecting pin b^8 of the keeper plate b^3 serves to encounter a cam c^1 of the latch member c when the door is closed, thereby causing the handle c^2 of said latch member c to swing into a horizontal locking position and hence causing the tongue c^7 thereof to be wedged upwardly against the rear concaved edge b^4 of the

keeper plate b^4, by the weight and momentum of the handle c^5, thereby to hold said tongue c^7 securely in such locked position until it is desired to open the door a', for any purpose.

The latch member c consists of a base plate c^6, perforated at c^8, for the reception of screws and provided with a right angular bearing bracket c^4, formed integral therewith, which is adapted to support the pivotal latch c^2. The pivotal latch c^2, carried by the pivot pin or rivet c^3, consists of the handle portion c^5 and the tongue c^7 extending in the opposite direction and in alinement therewith, and is also provided with the inclined concaved cam c' also formed integral therewith, as shown particularly in Figure 4.

The described arrangement of keeper and latch is such that by slamming of the door with the lever rod or handle in a substantially vertical position and with the cam c^1 thereof laterally projecting, the latter will contact with the pin b^9 of the keeper b, so that the handle b^5 will be deflected downwardly causing the tongue to enter the recess b^{10} behind the keeper plate b^3 at the same time the cam c^1 will ride onto the pin b^9, of the said keeper to impart momentum to the handle b^5 and thus to force the tongue c^7 into a wedging position in the recess b^{10} of said keeper thereby to hold the door securely against opening until a reversed movement of the lever rod which causes the cam to ride again over the pin b^9, of the keeper, and simultaneously therewith, causing the tongue c^7 to be withdrawn from the recess b^{10} of the keeper b. In this position, the door occupies an open relation with respect to the refrigerator for access thereto.

The fastener will close automatically, due to the cam action, whether the handle is in horizontal or perpendicular position. When in horizontal position the tongue c^7 rides the strike, or concave edge b^6, and the cam c^1 will strike the pin b^9 as the tongue reaches the nose b^6 or lower terminal of the front concaved edge b^6, and give it momentum to throw the tongue under the rear concaved edge b^4 of the keeper plate into recess b^{10}, closing the latch or fastener. When in perpendicular position the cam c^1 rides the pin b^9, giving the handle momentum to throw the tongue c^7 under the keeper plate b^3 into the recess b^{10}, again throwing the latch into locked position.

I am aware of Patent No. 1385102 dated July 19, 1921, and I disclaim the structure therein disclosed, as my invention is differentiated therefrom, since whereas the structure disclosed in said patent utilizes a pin function, but the pivotal latch c^2 carries a cam c^1 inclined to the pivot of said latch and adapted to coact with a pin b^9 carried by and laterally projecting from, the inner wall of the keeper plate b^3 thereby to swing the terminal tongue of the latch into the horizontal locking position; and to none of the constructions of the prior art do I herein make claim.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiments thereof which have been found in practice to give satisfactory and reliable results, it is to be understood that the same are susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:—

1. In a device of the character stated a fixed structure having an opening, a door for closing said opening, a keeper having a pin projecting laterally from its inner wall and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue whereby closing of said door causes said cam to be engaged by said pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

2. In a device of the character stated a fixed structure having an opening, a door for closing said opening a keeper of integral structure having a pin projecting laterally from its inner wall, said pin having its outer wall substantially convexed, and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected integral tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue and integral therewith whereby closing of said door causes said cam to be engaged by said convexed pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

3. In a device of the character stated, a keeper plate having a bottom front, down and rearwardly inclined cam edge and a

per cam carried thereby, inclined to the axis of the pivot of said latch member; said terminal tongue being adapted to ride downwardly along said front cam edge of said keeper plate to deflect said latch member into a substantially upright position and said tongue being adapted to interlock with said upright rear locking edge on said keeper plate, when said latch member is in a substantially horizontal position, and a laterally projecti wall of said ke coact with said by said latch m from a substant tal position, so tongue to interl edge of said kee

until it is desired to open the door a', for any purpose.

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I am aware of Patent No. 1385102 dated July 19, 1921, and I disclaim the structure therein disclosed, as my invention is differentiated therefrom, since whereas the structure disclosed in said patent utilizes a pin 12 carried by the latch arm 11, which coacts with an upper cam edge 18 of the keeper member 17; in my novel construction the upper edge of my keeper plate b^2 has no and adapted to coact with a pin b^9 carried by and laterally projecting from, the inner wall of the keeper plate b^2 thereby to swing the terminal tongue of the latch into the horizontal locking position; and to none of the constructions of the prior art do I hereinmake claim.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiments thereof which have been found in practice to give satisfactory and reliable results, it is to be understood that the same are susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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2. In a device of the character stated a fixed structure having an opening, a door for closing said opening a keeper of integral structure having a pin projecting laterally from its inner wall, said pin having its outer wall substantially convexed, and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected integral tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue and integral therewith whereby closing of said door causes said cam to be engaged by said convexed pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

3. In a device of the character stated, a keeper plate having a bottom front, down and rearwardly inclined cam edge and a rear substantially upright locking edge, a pivotally mounted latch member including a handle and a terminal tongue in substantial alignment with each other, and an up-

terminal tongue being adapted to ride downwardly along said front cam edge of said keeper plate to deflect said latch member into a substantially upright position and said tongue being adapted to interlock with said upright rear locking edge on said keeper plate, when said latch member is in a substantially horizontal position, and a

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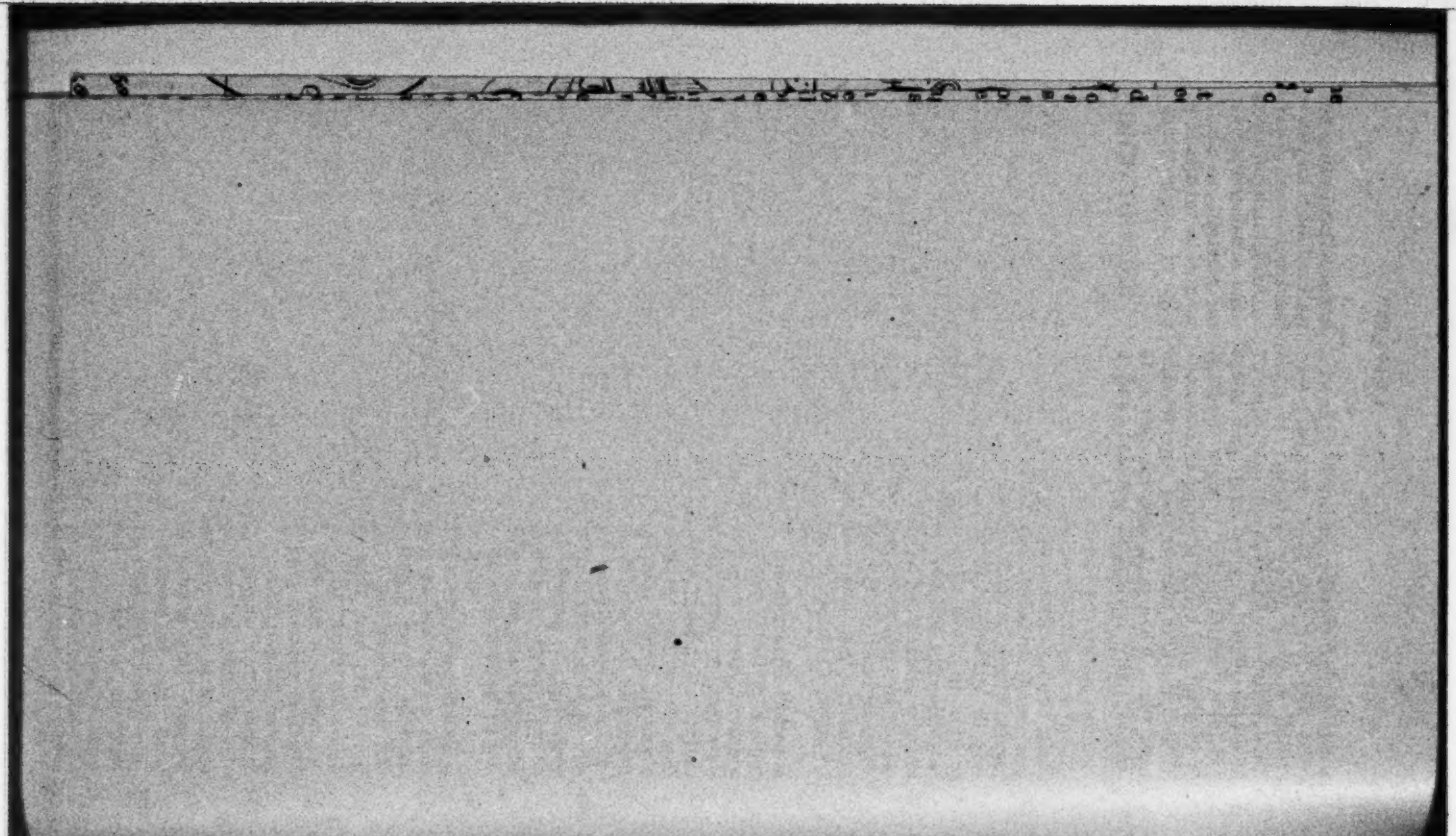
2. In a device of the character stated a fixed structure having an opening, a door for closing said opening a keeper of integral structure having a pin projecting laterally from its inner wall, said pin having its outer wall substantially convexed, and a rear cam riding surface and a bottom recessed portion, a locking member for said door comprising a pivotal handle having a projected integral tongue in substantial alignment with the handle, said handle having an upper cam arranged at an angle to said handle and tongue and integral therewith whereby closing of said door causes said cam to be engaged by said convexed pin to tilt said handle and to cause said tongue to engage said bottom recessed portion to automatically lock said door.

3. In a device of the character stated, a keeper plate having a bottom front, down and rearwardly inclined cam edge and a

per cam carried thereby, inclined to the axis of the pivot of said latch member; said terminal tongue being adapted to ride downwardly along said front cam edge of said keeper plate to deflect said latch member into a substantially upright position and said tongue being adapted to interlock with said upright rear locking edge on said keeper plate, when said latch member is in a substantially horizontal position, and a laterally projecting pin carried by the inner wall of said keeper plate and adapted to coact with said upper inclined cam carried by said latch member to deflect the latter from a substantially upright to a horizontal position, so as to cause said terminal tongue to interlock with said rear locking edge of said keeper plate.

THOS. O. SCHRADER



DEFENDANT'S EXHIBIT No. 11.

U. S. Patent No. 702,185 to A. Charles.

No. 702,185. Patented June 10, 1902.

A. CHARLES.

LATCH.

(Application filed Jan. 28, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

Fig. 2.

Fig. 3.

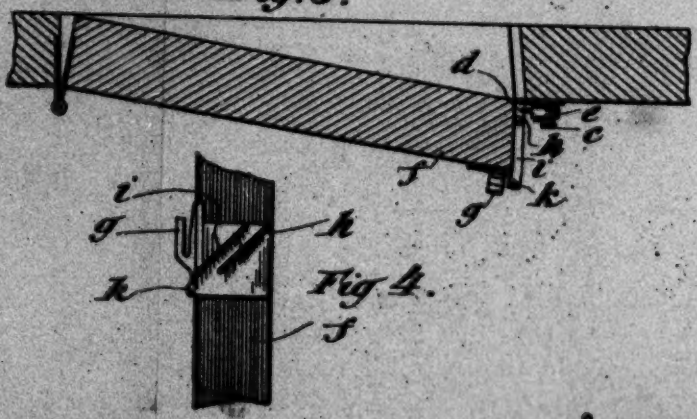
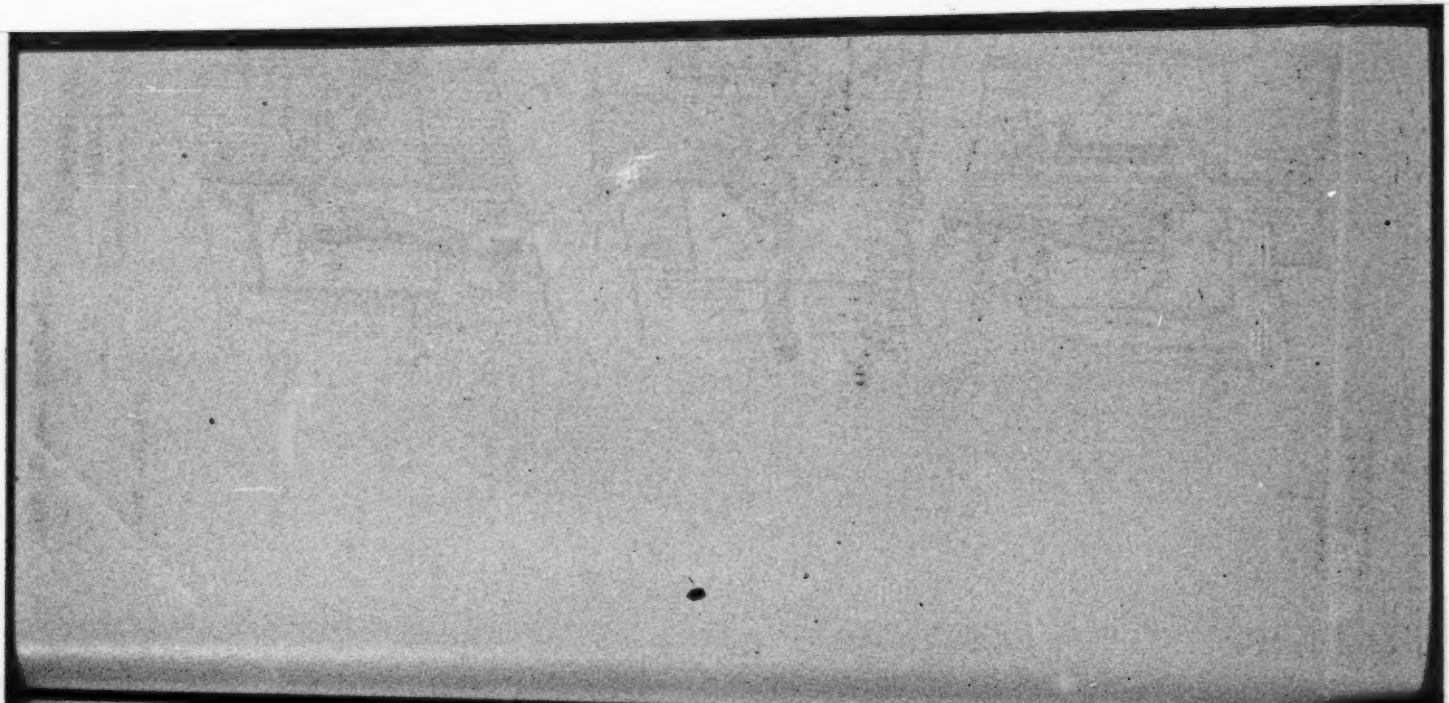


Fig 4.

Witnesses
Thomas Kilgorin
F. B. Thurber

Inventor
Antoine Charles
by Alexander & Co



LATCH.

(No Model.)

(Application filed Jan. 26, 1901.)

2 Sheets—Sheet 2.

Fig. 5.

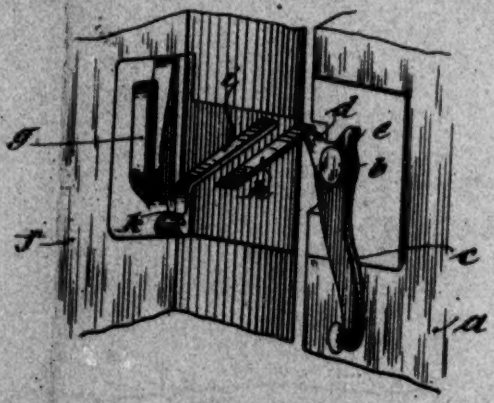


Fig. 6.

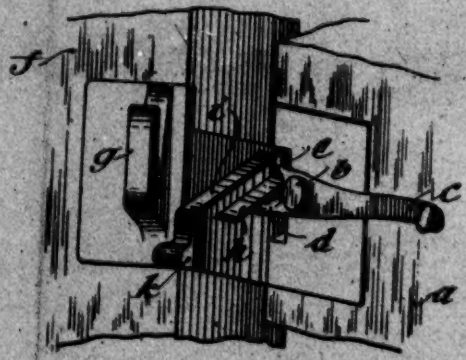
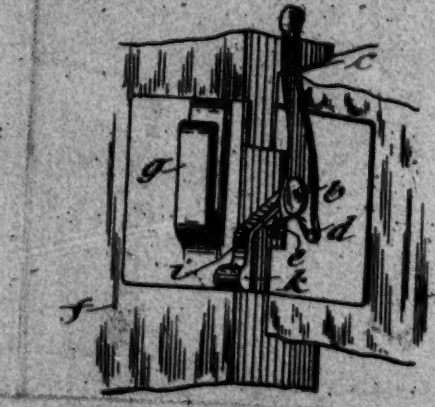


Fig. 7.



Witnesses
Thomas Kirkpatrick
H. C. Hazelhurst

Inventor
Antoine Charles
by Alexander & Co
Attorneys

UNITED STATES PATENT OFFICE.

ANTOINE CHARLES, OF LIEGE, BELGIUM.

LATCH.

SPECIFICATION forming part of Letters Patent No. 702,185, dated June 10, 1902.

Application filed January 28, 1901. Serial No. 45,049. (No model.)

To all whom it may concern:

Be it known that I, ANTOINE CHARLES, engineer, a citizen of Belgium, residing at Rue Lairesse No. 117, Liege, in the Kingdom of Belgium, have invented a certain new and useful Latch; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention relates to automatic safety-latches, and is designed especially for the doors of railway-carriages.

The object of the invention is to provide a safety-latch supported on the door-jamb cooperating with guides on the door itself, which guides are arranged to coact with projections on the latch, so that in the closing movement of the door the latch is automatically operated in a sort of screw movement and automatically engages the latch-catch on the door.

The invention consists, in brief, of a pivoted latch provided with projections engaging inclined guides on the door, the projections on the latch coming successively in contact with said inclined guides in such a manner that a rotating action is given to the pivoted latch by the successive contact of said inclined guides with the respective projections on the latch.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a front view of a portion of a door and its supporting-casing, showing the latch in closed position. Fig. 2 is a similar view showing the latch in open position. Fig. 3 is a horizontal section showing the door partially open. Fig. 4 is a detail view of the guiding-plate and latch-catch attached to the door; and Figs. 5, 6, and 7 represent in perspective the parts in various positions during the course of operation.

In the drawings, *a* represents the door-jamb, to which is attached a suitable supporting-plate, upon which is pivoted on the pin or pivot *b* the locking-latch *c*, provided with a thumb-piece, as shown. This latch has preferably arranged at one end shoulders or offsets *d e*. The door is shown at *f* and is provided on the front side with an upwardly-opening latch-catch *g*, while to the edge of the door are attached inclined guides *h* and *i*, which parts, together with the latch-catch, are preferably arranged upon a common angle-iron. A stop *k* is also provided on said door to prevent the pivoted latch *c* when in its lowest position, as shown in Figs. 2 and 5, from throwing back against the door, thus preventing the opening of the same. When the door is closed, the pivoted latch lies in the usual manner in the latch-catch *g*; but when it is desired to open the door the latch is thrown by hand about its pivot *b* to the position shown in Figs. 2 and 5 and in which the stop *k* prevents too great a swing of the pivoted latch. The position of the shoulders *d* and *e* on the latch *c* is so chosen that the shoulder *d* on opening the door (see Fig. 3) impinges on the guides *h* and *i*, and therefore with its point projects somewhat over these guides. On closing the door, therefore, the shoulder *d* will pass under the guide *h*, which position is shown in Fig. 5, and in the further closing of the door the shoulder *d* slides on the inclined guide *h*, and because of the inclination thereof the latch *c* turns on its pivot *b* until the latch finally comes into the position shown in Fig. 6. Then the shoulder *d* passes under the guide-strip *i* and, sliding on this, continues the rotation of the latch *c*, when the shoulder *d* passes out of engagement with the guide *h*, the latch finally reaching the position shown in Fig. 7, and a very small further movement of the door suffices to allow the latch *c* to fall by gravity into the latch-catch *g*.

While, therefore, the opening of the door is performed manually in the ordinary manner when the door is shut, there takes place an automatic locking by means of the above-described device.

It will be noticed that the action of the guides *h* and *i* upon the respective offsets *d* and *e* is generally like that of two screw-threads with crossed axes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An automatic safety-catch for doors, comprising a pivoted latch, a latch-catch carried by the door, and means carried by said door for successively engaging and rotating said

latch and causing it to engage the catch; substantially as described.

2. An automatic safety-latch for doors, comprising a pivoted latch having a plurality of offsets, inclined guides carried by the door with which the offsets successively respectively engage, and a latch-catch on the door; substantially as described.

3. An automatic catch for doors comprising the pivoted latch *c*, having the offsets or lugs *d*, *e*, in combination with a door provided with inclined guides *h* and *i*, with which the offsets *d*, *e*, respectively successively engage, and a latch-catch *g*; substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

A. CHARLES.

Witnesses:
J. ERWINIE,
JEN. RUSTING.

DEFENDANT'S EXHIBIT No. 14.
File Wrapper and Contents, Letters Patent No. 1,385,-102 to Alexander F. Winters and Basil R. Crampton.

390

DEPARTMENT OF COMMERCE
UNITED STATES PATENT OFFICE

To all persons to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of the File Wrapper and Contents, in the matter of the

Letters Patent of

Alexander F. Winters and Basil R. Crampton,

Number 1,385,102, Granted July 19, 1921,

for

— — Improvement in Latches.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the City of Washington, this twenty-sixth day of March in the year of our Lord, one thousand nine hundred and twenty-seven and of the Independence of the United States of America the one hundred and fifty-first.

substantially as described.

3. An automatic catch for doors comprising the pivoted latch c, having the offsets or lugs d, e, in combination with a door provided with

A. CHARLES.

Witnesses:
J. ERWINIE,
JEN. RUSTING.

DEPARTMENT OF COMMERCE
UNITED STATES PATENT OFFICE

To all persons to whom these presents shall come, Greeting:

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Letters Patent of

Alexander P. Winters and Basil R. Crampton,

Number 1,385,102, Granted July 19, 1921,

for

Improvement in Latches.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the City of Washington, this twenty-sixth day of March in the year of our Lord, one thousand nine hundred and twenty-seven and of the Independence of the United States of America the one hundred and fifty-first.

ATTEST: J. Ercolano
Chief of Division.

Thomas E. Robertson
Commissioner of Patents.

NUMBER (Series of 1915), 428891

1920
~~1918~~

(EX'R'S BOOK) 212

DIV. 20

PATENT No. 1385102 73

Name Alexander F. Winters and Basil R. Crampton

of Grand Rapids

County of

State of Michigan

Invention Latch

PARTS OF APPLICATION FILED.

	ORIGINAL	RENEWED
Petition	Dec 7, 1920	, 191
Affidavit	" ", 1920	, 191
Specification	" ", 1920	, 191
Drawing 2 sh	" ", 1920	, 191
Photo Copy	, 191	, 191
First Fee Cash $15	Dec 7, 1920	, 191
" " Cert.	, 191	, 191
Appl. filed complete	Dec 7, 1920	, 191
Examined and Passed for Issue	June 21, 1921	, 191
A. L. Wright.	Exr. Div. 20	Exr. Div.
Notice of Allowance	JUN 24 1921, 191 By Commissioner.	, 191 By Commissioner.
Final Fee Cash $20	June 22, 1921	, 191
" " Cert.	, 191	, 191
Patented		, 191

Division of App., No. ....., filed ....., 191

Attorney Frank E. Liverance Ja. Houseman Bldg. Grand Rapids Mich.

#2209

Serial No. 42889 Paper No. 1
Application.

Published by Munn & Co., Patent Attorneys, Grand Rapids

RECEIVED
DEC 1920
U.S. PAT. OFFICE

PETITION

To the Commissioner of Patents:

Your petitioners, Alexander F. Winters and Basil R. Crampton,
citizens
of the United States of America, residing at Grand Rapids
in the County of Kent *State of* Michigan
whose post-office address is C/o Winters & Stryker, Grand Rapids, Michigan,
pray that Letters Patent may be granted to them *for improvement in*
LATCH
as set forth in the annexed specification.

And they hereby appoint FRANK E. LIVERANCE, JR., ~~[illegible]~~ *of Grand Rapids, Michigan* their *Attorneys with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the patent, and to transact all business in the Patent Office connected therewith.*

Signed at Grand Rapids *in the County of* Kent
and State of Michigan *this* day of 1920.

Inventor's full name Alexander F. Winters
Basil R. Crampton

SPECIFICATION.

To all Whom it may Concern:

BE IT KNOWN that We, Alexander F. Winters and Basil R. Crampton,
L.C.
citizens *of the United States of America, residing at* Grand Rapids,
in the County of Kent *and State of* Michigan,

DIV. 20 PATENT No. 1365162

Name Alexander F. Winters and Basil R. Crampton

of Grand Rapids

County of

State of Michigan

Invention Latch

PARTS OF APPLICATION FILED.

ORIGINAL		RENEWED
Petition	Dec 7, 1920	, 191
Affidavit	" ", 1920	, 191
Specification	" ", 1920	, 191
Drawing 2 sh	" ", 1920	, 191
Photo Copy	, 191	, 191
First Fee Cash $15	Dec 7, 1920	, 191
" " Cert.	, 191	, 191
Appl. filed complete	Dec 7, 1920	, 191
Examined and Passed for Issue	June 21, 1921	, 191
A. L. Wright.	Ex. Div. 20	Ex. Div.
Notice of Allowance	JUN 24 1921, 191 By Commissioner.	, 191 By Commissioner.
Final Fee Cash $20	June 22, 1921	, 191
" " Cert.	, 191	, 191
Patented		, 191

Attorney Frank E. Livernance, 7 Houseman Bldg, Grand Rapids Mich.

Associate Attorney

(No. of Claims Allowed 7) Print Claim 1 in O. G. (Cl 222-241)

Title as Allowed Latch

Division of App., No. , filed , 191

C.C.H.S.

To the Commissioner of Patents:

107

Your petitioners, Alexander F. Winters and Basil R. Crampton, citizens of the United States of America, residing at Grand Rapids in the County of Kent State of Michigan whose post-office address is C/o Winters & Stryker, Grand Rapids, Michigan, pray that Letters Patent may be granted to them for improvement in

LATCH

as set forth in the annexed specification.

And they hereby appoint FRANK E. LIVERANCE, JR., of Grand Rapids, Michigan their Attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Grand Rapids in the County of Kent and State of Michigan this day of 1920.

Inventor's full name { Alexander F. Winters
Basil R. Crampton

SPECIFICATION.

To all Whom it may Concern:

BE IT KNOWN that We, Alexander F. Winters and Basil R. Crampton, l.c. citizens of the United States of America, residing at Grand Rapids, in the County of Kent and State of Michigan, have invented certain new and useful improvements in

LATCHES; l.c.

and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

#2309.

This invention relates to a latch of the swinging lever type, particularly adapted for use on refrigerators though applicable in many other relations where a door is to be closed and held in closed position. The swinging lever latch, or as it is better known, the ~~condit~~ Condit latch, is pivotally connected at one end to the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertantly swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other. A further object of the invention is to construct a latch of few parts, whereby it may be economically made and which will be durable and efficient in service. Other objects and purposes will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawings, in which,

Figure 1 is a front elevation showing the latch in closed position and holding a door closed.

Fig. 2 is a side elevation thereof.

Fig. 3 is an under plan view of the latch, the door and adjacent portion of the casing therefor being in section.

Fig. 4 is a view similar to Fig. 1 showing the door approaching closed position with the swinging lever in vertical relation to the door.

Fig. 5 is a side elevation thereof.

Fig. 6 is a front elevation showing the action on the swinging lever as the door approaches closed position after said lever has been in horizontal position, and

Fig. 7 is a side view thereof.

Like reference characters refer to like parts in the different figures of the drawings.

The door 1 and the adjacent portion of the casing 2 against which the free vertical edge of the door comes in closing are shown fragmentarily, only enough being shown to disclose the attachment of the lever and keeper thereto. The lever is carried by the door. A base 3, attached to the door by screws 4 or equivalent connecting means has an integral outstanding post 5 from which, at the outer end an arm 6 extends over and paralleling the base. The lever 7 is placed between said arm and the base and a pivot pin 8 passed through the same, pivotally mounting the lever at a point between its ends. An arm 9 forming a part of the lever extends from the pivot and is adapted to cross the meeting edges of the door and casing when the door is closed and the lever in horizontal position, this arm passing under the keeper attached to the door casing. The under side of the arm 9 is formed at an angle as indicated at 10 the purpose of which will later appear.

In the opposite direction the lever extends from the pivot and is formed into a handle 11 set out a distance from the door to allow the passage of the fingers of the operator between

it and the door. A short distance from the pivot an arm 12 is formed integral with the lever, being located substantially at right angles to the arm 9. The under side of arm 12 when the lever is vertically positioned is formed with a rounded cam surface 13, as shown, the purpose of which will also appear later.

The keeper comprises a base 14 attached to the casing 2 by screws 15 or like fastening means from which a post 16 extends outwardly for a short distance terminating in a head 17 which is extended downwardly for a distance below the lower edge of the post. The head on its outer sides is formed with two curved surfaces 18 and 19 which come to a point substantially at the front and between the upper and lower ends of said head, while on its inner side it is cut upwardly and inwardly at a slight angle to the vertical, forming a wedging cam 20, as shown.

The latch lever may be thrown to upper position, as shown in Fig. 4, being stopped from going beyond such position by engagement of the arm 9 with the lower shoulder 5a made by post 5. It may also be carried to a horizontal position, being likewise stopped when it reaches such position by the upper shoulder 5b. When the door is moved toward closing position with the lever vertically located, the cam side 13 of arm 12 strikes against the curved upper side 18 of head 17, causing the lever to be automatically swung toward the horizontal, and bringing the arm 9 into place so as to pass under the lower point of the keeper head so that it may engage at its outer side against the wedging cam side 20 of the head. It is apparent that by giving the end of handle 11 a downward movement, the door will be wedged tightly shut as the arm 9 moves upwardly and against the incline 20. To open the door it is merely necessary to grasp handle 11 and turn it to upper position, releasing the door, and the door may be opened at the same time by pulling outwardly on the handle after arm 9 has disconnected

from the keeper.

If the lever has dropped to horizontal position while the door is open, the closure of the door and engagement of the lever with the keeper is accomplished by merely swinging the door shut, in which case, as shown in Figs. 6 and 7, the arm 9 strikes with its inclined cam side 10 against the lower curved side 19 of the head 17 of the keeper, causing the handle to be automatically turned toward vertical position. This movement continues until the arm 9 passes by the lower point of the keeper head 17 or, as usually occurs, the arm 12 comes into contact with the head at the upper side 18, whereupon the lever is actuated so as to bring the arm 9 under the depending portion of the keeper, the same as before described when closing the door with the lever in vertical position. In any case, the latch lever engages with the latch keeper when the door is closed irrespective of the position of the lever. This is a feature of merit in the invention and one of particular value from a practical standpoint when the latch is used on refrigerators.

This latch construction is very simple, consisting of but three parts and a pivot pin, all of which may be readily cast from metal or formed with proper dies from sheet metal. The mounting of the lever on the door is of value as use of one hand only is necessary for unlatching and drawing the door open. The ability to close the door and latch it automatically, irrespective of the position of the latch lever insures against injury to the latch or door and also insures that the door will be latched when it is swung shut. All of these features combined in the latch structure make it one of exceptional merit.

1. In combination, a door and a casing therefor, a keeper attached to the casing comprising a base, an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member attached to the door comprising a base, an integral outstanding post projecting from the base and a laterally extending arm at the upper end of the post paralleling the base, and a latch lever pivotally mounted between its ends between the said arm and base of said member, said lever having one arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper, a handle portion extending in the opposite direction from the pivot and another arm projecting from the handle portion a distance from the pivot and lying substantially at right angles to the first arm of the lever and likewise being formed with an inner cam side, substantially as and for the purposes described.

2. In combination, a door and a casing therefor, a keeper attached to the casing including an outer head spaced from the casing and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member secured to the door, and a latch lever pivotally mounted between its ends on said member, said lever having one arm extended from the pivot adapted to ride against the lower outer side of the keeper head when the door is closed with the lever in horizontal position to automatically turn the lever to bring said arm back of the head, a handle portion extending in the opposite direction from said pivot and a second arm projecting from the handle portion at an angle to the first arm and adapted to ride against the upper outer side of the keeper when the door is closed with the lever positioned vertically to throw the lever to horizontal position and automatically engage the first arm with the keeper back of said head,

3. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the door and engagable with the keeper to hold the door in closed position, of means on the keeper and means on the latch lever to engage with the keeper on the outer sides thereof to swing the lever into engagement with the keeper at the inner side thereof when the door is closed with the lever occupying either a vertical or a horizontal position, substantially as described.

4. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the door and engagable with the keeper to hold the door in closed position, of two arms on the latch lever one of which is engaged with an outer portion of the keeper when the door is moved to closing position to swing the lever from a vertical position to a horizontal position and engage the other arm under the keeper, and the other of which is engaged with a different outer portion of the keeper when the door is moved to closing position and the lever is horizontal to turn the lever upwardly toward vertical position or until said other arm passes under and engages with the keeper to hold the door closed, substantially as described.

5. In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including one arm extending from the pivot, a handle portion extending in the opposite direction from the pivot, and a second arm extending from the handle portion ~~a short distance from~~ adjacent the pivot and in a direction substantially at right angles to the first arm, substantially as described.

6. A latch containing the elements in combination defined in claim 5, said arms on their inner sides being formed with cam surfaces, substantially as described.

7. A keeper for latches comprising a base, a post projecting outwardly from the base at the upper portion thereof, and a head to the post depending below the same and being substantially triangular in outline, having an upper and a lower outer side coming substantially to a point and an inner upwardly and inwardly inclined side, substantially as described.

8. In combination, a door and a casing therefor, a keeper attached to the casing, a latch lever pivotally mounted on the door between its ends, one end of the lever being formed into an operating handle and the other into a keeper engaging arm, a second arm projecting from the handle portion of the lever a short distance from its pivot and at an angle to the first arm, said keeper being formed at its outer sides for engagement with the respective arms when the lever is in horizontal and vertical positions, respectively, as the door is closed, to automatically operate the lever so that it will engage under the keeper when the door is entirely closed, substantially as described.

In testimony whereof we *affix* our *signature*s.

Alexander F. Winters
Basil R. Crampton

OATH.

STATE OF MICHIGAN, }
County of Kent } ss.

Alexander F. Winters and Basil R. Crampton,

*the above named petitioner*s, *being duly sworn depose and say that* they are *citizen*s *of the United States of America, and resident*s *of* Grand Rapids *in the County of* Kent *and State of* Michigan; *that* they *verily believe* themselves *to be the original, first and* joint *inventor*s *of the improvement in* LATCH *described and claimed in the annexed specification; that* they *do not know, and do not believe the same was ever known or used before* their *invention or discovery thereof, or patented or described in any printed publication in any country before* their *invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by* them *or* their *legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by* them *or* their *legal representatives or assigns in any country foreign to the United States* ~~except as follows:~~

Alexander F. Winters
Basil R. Crampton

7. A keeper for latches comprising a base, a post projecting outwardly from the base at the upper portion thereof, and a head to the post depending below the same and being substantially triangular in outline, having an upper and a lower outer side coming substantially to a point and an inner upwardly and inwardly inclined side, substantially as described.

8. In combination, a door and a casing therefor, a keeper attached to the casing, a latch lever pivotally mounted on the door between its ends, one end of the lever being formed into an operating handle and the other into a keeper engaging arm, a second arm projecting from the handle portion of the lever a short distance from its pivot and at an angle to the first arm, said keeper being formed at its outer sides for engagement with the respective arms whom the lever is in horizontal and vertical positions, respectively, as the door is closed, to automatically operate the lever so that it will engage under the keeper when the door is entirely closed, substantially as described.

In testimony whereof we *affix* our *signatures*

Alexander F. Winters

Basil R. Crampton

OATH.

STATE OF MICHIGAN, }
County of Kent } *ss.*

Alexander F. Winters and Basil R. Crampton,

the above named petitioners, being duly sworn depose and say that they are *citizens of the United States of America, and residents of* Grand Rapids *in the County of* Kent *and State of* Michigan *; that* they *verily believe* themselves *to be the original, first and* joint *inventors of the improvement in*

LATCH

described and claimed in the annexed specification; that they *do not know, and do not believe the same was ever known or used before* their *invention or discovery thereof, or patented or described in any printed publication in any country before* their *invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by* them *or* their *legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by* them *or* their *legal representatives or assigns in any country foreign to the United States* ~~except as follows:~~

Alexander F. Winters

Basil R. Crampton

Div. 30 Room 179 Ser. No. VW Paper No. 2

Address only "The Commissioner of Patents, Washington, D. C." and not any official by name.

All communications regarding this application should give the serial number, date of filing, title of invention, and name of the applicant.

DEPARTMENT OF THE INTERIOR

Wms

UNITED STATES PATENT OFFICE

WASHINGTON April 15, 1921

U. S. PATENT OFFICE
APR 15 1921
MAILED

Frank E. Livernance,
Houseman Bld'g,
Grand Rapids, Mich.

Please find below a communication from the EXAMINER in charge of the application of

Alexander F. Winters and Basil R. Crampton, for Latch, filed Dec. 7, 1920, Serial No. 428,891

Thomas E. Robertson
Commissioner of Patents.

Claim 7 does not patentably distinguish over the following patents:

Keil,	554,448,	Feb. 11, 1896,	(292-341)
Ward,	1,250,736,	Dec. 18, 1917,	(292-342)

and is rejected.

The remaining claims appear allowable.

In amending see the following art:

Dent,	670,506,	Mar. 26, 1901,	(292-341)
Hadka,	743,716,	Nov. 10, 1903, and	
Blye,	1,238,876,	Sept. 4, 1917,	(292-342).

Exr. Div. 30

4/21/21
10

JUN 14 1921 U.S. PATENT OFFICE

Serial No. 428,891 Paper No. 3.

a-

Alexander F. Winters and
Basil R. Crampton,
Ser. No. 428,891,
Filed Dec. 7, 1920,
Latch.

Div. 20;
Room 179.

PATENT OFFICE JUN 14 1921 DIVISION 20.

Hon. Commissioner of Patents,
Washington, D.C.

Sir:

In response to the Office action of April 15, 1921, in the above case, amendment is made as follows:

Claim 5, line 6, cancel "a short distance from" and substitute---adjacent---.

Cancel claim 7.

Remarks.

The rejected claim has been cancelled, primarily as the subject matter thereof is divisional when claimed in itself, and it is the intention of the inventors to file a divisional application thereon.

The amendment to claim 5 does not change the same in substance.

An early allowance is requested in view of the fact that no examination of any kind has to be made further.

Very respectfully,

WINTERS and CRAMPTON,

By Frank E. Latch Jr.
Attorney.

Div.30-LVW

ADDRESS ONLY
THE COMMISSIONER OF PATENTS,
WASHINGTON, D. C.

2-181

Serial No. 428,891

DEPARTMENT OF THE INTERIOR

UNITED STATES PATENT OFFICE

WASHINGTON June 21, 1921

U.S. PATENT OFFICE JUN 21 1921

Alexander F. Winters and Basil R. Crampton,

Sir: Your APPLICATION for a patent for an IMPROVEMENT in Latch

filed Dec. 7, 1920, has been examined and ALLOWED.

The final fee, TWENTY DOLLARS, must be paid not later than SIX MONTHS from the date of this present notice of allowance. If the final fee be not paid within that period, the patent on this application will be withheld, unless renewed with an additional fee of $15, under the provisions of Section 4897, Revised Statutes.

The office delivers patents upon the day of their date, and on which their term begins to run. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will require about four weeks, and such work will not be undertaken until after payment of the necessary fee.

When you send the final fee you will also send, DISTINCTLY AND PLAINLY WRITTEN, the name of the INVENTOR, TITLE OF INVENTION, AND SERIAL NUMBER AS ABOVE GIVEN, DATE OF ALLOWANCE (which is the date of this circular), DATE OF FILING, and, if assigned, the NAMES OF THE ASSIGNEES.

If you desire to have the patent issue to ASSIGNEES, an assignment containing a REQUEST to that effect, together with the FEE for recording the same, must be filed in this office on or before the date of payment of final fee.

After issue of the patent, certified copies of the drawings and specifications may be purchased at the price of TEN CENTS EACH. The money should accompany the order. Postage stamps will not be received.

Final fees will NOT be received from other than the applicant, his assignee or attorney, or a party in interest as shown by the records of the Patent Office.

Respectfully,

Thomas E. Robertson

Commissioner of Patents.

Frank E. Liverance, Jr.,

Houseman Bld'g.,

Grand Rapids, Mich.

IN REMITTING THE FINAL FEE GIVE THE SERIAL NUMBER AT THE HEAD OF THIS NOTICE.

UNCERTIFIED CHECKS WILL NOT BE ACCEPTED.

20

2—327.1

MEMORANDUM

OF

FEE PAID AT UNITED STATES PATENT OFFICE.

(Be careful to give correct Serial No.)

Serial No. 428,891 June 22, 1921

INVENTOR:

Alexander F. Winters & Basil R. Crampton

PATENT TO BE ISSUED TO

Inventors

NAME OF INVENTION, AS ALLOWED:

Label

DATE OF PAYMENT:

June 22, 1921

FEE:

Final Payment Fee ($20.00)

DATE OF FILING:

Dec. 7, 1920

DATE OF CIRCULAR OF ALLOWANCE:

June 21, 1921

The Commissioner of Patents will please apply the accompanying fee as indicated above.

Frank E. Liverance, Jr
Attorney.

SEND PATENT TO

Frank E. Liverance, Jr
Houseman Bldg.
Grand Rapids, Mich

4—3315

Div. 32 Room 179

Address only "The Commissioner of Patents, Washington, D. C." and not any official by name.

2-554

Paper No. 4

All communications regarding this application should give the serial number, date of filing, date of invention, and name of the applicant.

DEPARTMENT OF THE INTERIOR
UNITED STATES PATENT OFFICE
WASHINGTON

EXAMINER'S AMENDMENT.

Please find below a communication from the ***EXAMINER*** *in charge of the application of*

Alexander F. Winters and Basil R. Crampton, Serial No. 428891, filed Dec 7, 1920 for Latch.

Commissioner of Patents.

In accordance with the provisions of Order No. 2308, dated March 12, 1917, which reads in part as follows:

* * * * * * *

Obvious informalities in the application may be corrected by the examiner, but said correction must be in the form of an amendment, approved by the Principal Examiner in writing, placed in the file, and made a part of the record. The changes specified in the amendment will be entered by the clerk in the regular way.

* * * * * * *

the changes, hereinafter specified, are made by the examiner in the application above identified.

Should these changes not be satisfactory to the applicant, appropriate amendment may be proposed under the provisions of Rule 78, provided the specification has not been printed.

The application has been amended as follows:

Page 1 line 5 change "condit" to Condit.

Page 3 line 31 change "this" to thus.

G. L. Wright
Ex. Div 20.

MAIL ROOM NOV 27 1925 U.S. PATENT

United States District Court

#5

Eastern *District of* Wisconsin.

HONORABLE COMMISSIONER OF PATENTS,
Washington, D. C.

SIR:

In compliance with the Act of February 18, 1922 (42 Stat. L. ....), you are advised that there was filed on the 23rd day of November, 1925, in this court an action, suit, or proceeding No. 1688 C.D., entitled:

Name Alexander F. Winters, et al., Plaintiff,

Address Grand Rapids, Michigan,

versus

Name Sanitary Refrigerator Company, Defendant,

Address Fond du Lac, Wisconsin.

brought upon the following patents:

	PATENT NO.	DATE OF PATENT	PATENTEE
1	1,385,102	Dec. 7, 1920	Alexander F. Winters and
2			Basil R. Crampton,
3			
4			
5			

In the above-entitled case, on the ..... day of ....., 192 , the following patents have been included by ..... (insert amendment, answer, cross bill, or other pleading):

	PATENT NO.	DATE OF PATENT	PATENTEE
1			
2			
3			
4			
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In the above-entitled case the following decision has been rendered or decree issued:

.....

.....

~~1920~~
1918

CONTENTS:

1. Application _____ papers.
2. Rej April 15 1921
3. Appeal A June 13 1921
4. Ass Amend't
5. Notice of Suit Nov. 27-1924
6. Notice of Suit Mar. 24-1926
7. Notice of C.C. of Appeals July 2 1927
8. Notice of Suit Aug. 3-1927
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A. F. WINTERS AND B. R. CRAMPTON.

LATCH.

APPLICATION FILED DEC. 7, 1920.

1,385,102.

Patented July 19, 1921.

2 SHEETS—SHEET 1.

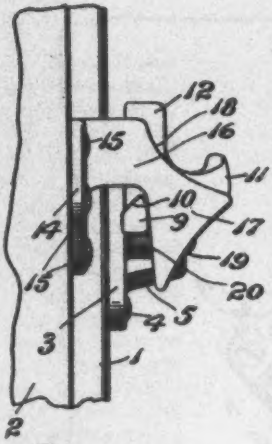

Fig. 2.

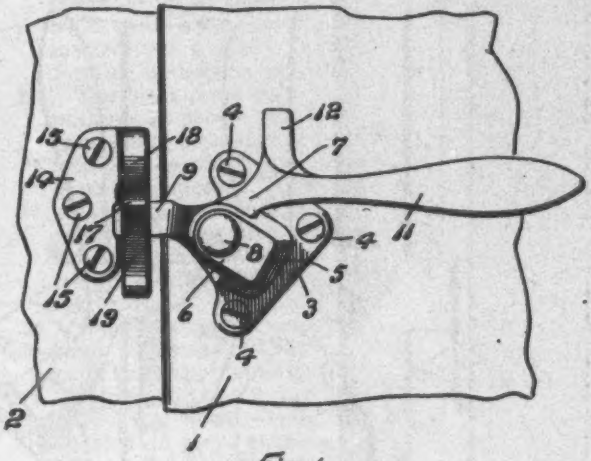

Fig. 1.

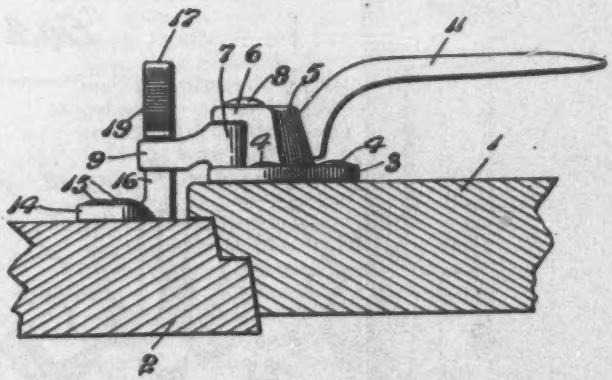

Fig. 3.

Inventors

Alexander F. Winters

Basil R. Crampton

By Frank E. Liverance, Jr.

Attorney

A. F. WINTERS AND B. R. CRAMPTON.

LATCH.

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2 SHEETS—SHEET 2.

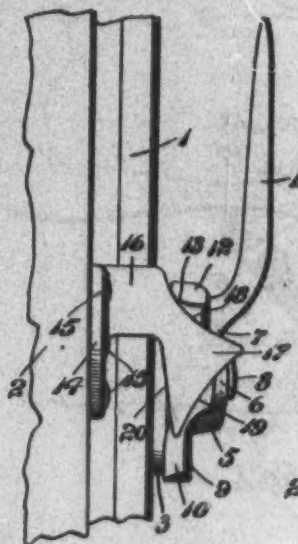


Fig. 5.

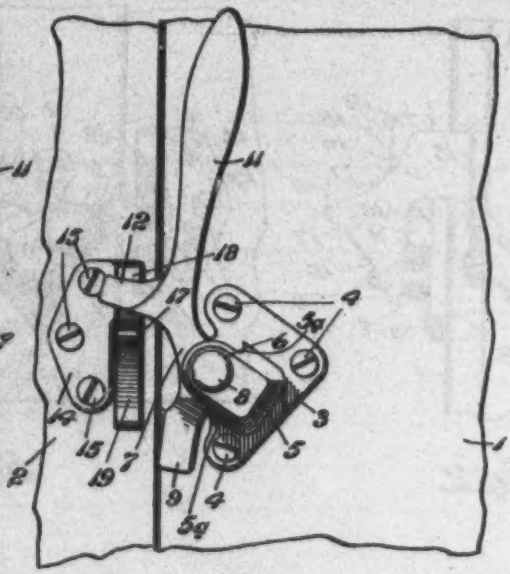


Fig. 4.

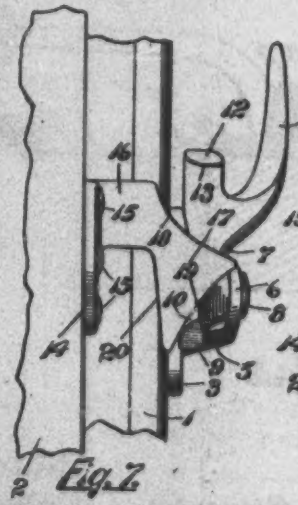


Fig. 7.

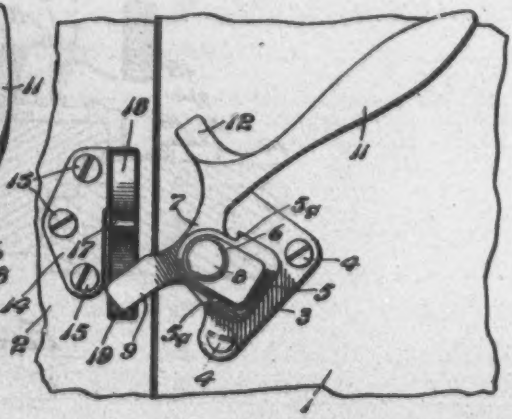


Fig. 6.

Inventors

Alexander F. Winters

Basil R. Crampton

By Frank E. Livermore Jr.

Attorney

UNITED STATES PATENT OFFICE.

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON, OF GRAND RAPIDS, MICHIGAN.

LATCH.

1,385,102. Specification of Letters Patent. Patented July 19, 1921.

Application filed December 7, 1920. Serial No. 428,891.

To all whom it may concern:

Be it known that we, ALEXANDER F. WINTERS and BASIL R. CRAMPTON, citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Latches; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a latch of the swinging lever type, particularly adapted for use on refrigerators though applicable in many other relations where a door is to be closed and held in closed position. The swinging lever latch, or as it is better known, the Condit latch, is pivotally connected at one end to the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertently swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other. A further object of the invention is to construct a latch of few parts, whereby it may be economically made and which will be durable and efficient in service. Other objects and purposes will appear as understanding

Fig. 2 is a side elevation thereof.

Fig. 3 is an under plan view of the latch, the door and adjacent portion of the casing therefor being in section.

Fig. 4 is a view similar to Fig. 1 showing the door approaching closed position with the swinging lever in vertical relation to the door.

Fig. 5 is a side elevation thereof.

Fig. 6 is a front elevation showing the action on the swinging lever as the door approaches closed position after said lever has been in horizontal position, and

Fig. 7 is a side view thereof.

Like reference characters refer to like parts in the different figures of the drawings.

The door 1 and the adjacent portion of the casing 2 against which the free vertical edge of the door comes in closing are shown fragmentarily, only enough being shown to disclose the attachment of the lever and keeper thereto. The lever is carried by the door. A base 3, attached to the door by screws 4 or equivalent connecting means has an integral outstanding post 5 from which, at the outer end an arm 6 extends over and paralleling the base. The lever 7 is placed between said arm and the base and a pivot pin 8 passed through the same, pivotally mounting the lever at a point between its ends. An arm 9 forming a part of the lever extends from the pivot and is adapted to cross the meeting edges of the door and casing when the door is closed and the lever in horizontal position, this arm passing under the keeper attached to the door casing. The under side of the arm 9 is formed at an angle as indicated at 10 the purpose of which will later appear.

In the opposite direction the lever extends from the pivot and is formed into a handle 11 set out a distance from the door to allow the passage of the fingers of the operator between it and the door. A short distance from the pivot an arm 12 is formed integral with the lever, being located substantially at right angles to the arm 9. The under side of arm 12 when the lever is vertically positioned is formed with a rounded cam sur-

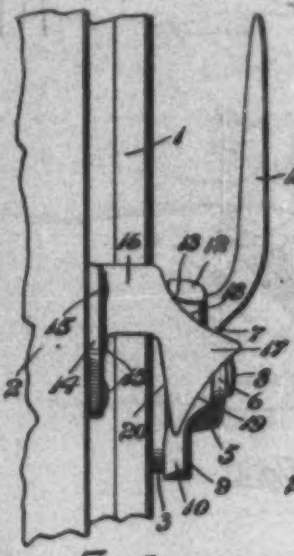


Fig. 5.

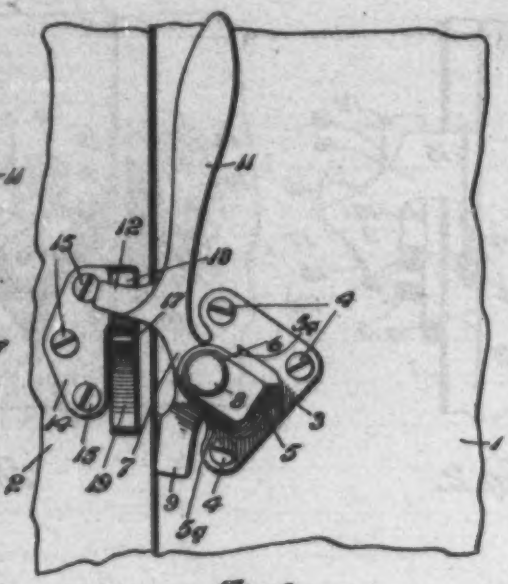


Fig. 4.

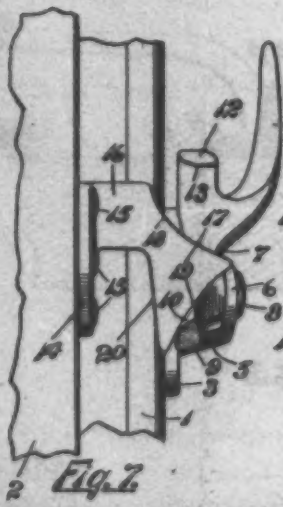


Fig. 7.

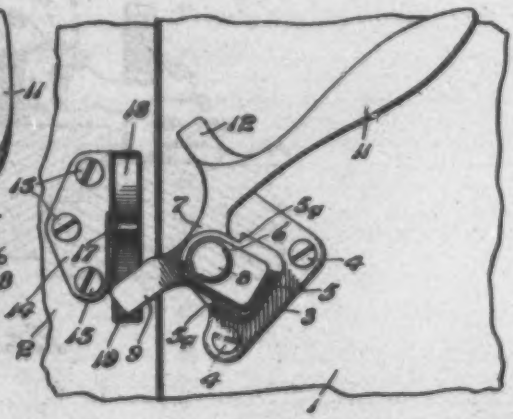


Fig. 6.

Inventors
Alexander F. Winters
Basil R. Crompton
By Frank E. Linnane Jr.
Attorney

Application filed December 7, 1920. Serial No. 428,891.

To all whom it may concern:

Be it known that we, ALEXANDER F. WINTERS and BASIL R. CRAMPTON, citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Latches; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a latch of the swinging lever type, particularly adapted for use on refrigerators though applicable in many other relations where a door is to be closed and held in closed position. The swinging lever latch, or as it is better known, the Condit latch, is pivotally connected at one end to the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertently swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other. A further object of the invention is to construct a latch of few parts, whereby it may be economically made and which will be durable and efficient in service. Other objects and purposes will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawings, in which,

Figure 1 is a front elevation showing the latch in closed position and holding a door closed.

Fig. 2 is a side elevation thereof.

Fig. 3 is an under plan view of the latch, the door and adjacent portion of the casing therefor being in section.

Fig. 4 is a view similar to Fig. 1 showing the door approaching closed position with the swinging lever in vertical relation to the door.

Fig. 5 is a side elevation thereof.

Fig. 6 is a front elevation showing the action on the swinging lever as the door approaches closed position after said lever has been in horizontal position, and

Fig. 7 is a side view thereof.

Like reference characters refer to like parts in the different figures of the drawings.

The door 1 and the adjacent portion of the casing 2 against which the free vertical edge of the door comes in closing are shown fragmentarily, only enough being shown to disclose the attachment of the lever and keeper thereto. The lever is carried by the door. A base 3, attached to the door by screws 4 or equivalent connecting means has an integral outstanding post 5 from which, at the outer end an arm 6 extends over and paralleling the base. The lever 7 is placed between said arm and the base and a pivot pin 8 passed through the same, pivotally mounting the lever at a point between its ends. An arm 9 forming a part of the lever extends from the pivot and is adapted to cross the meeting edges of the door and casing when the door is closed and the lever in horizontal position, this arm passing under the keeper attached to the door casing. The under side of the arm 9 is formed at an angle as indicated at 10 the purpose of which will later appear.

In the opposite direction the lever extends from the pivot and is formed into a handle 11 set out a distance from the door to allow the passage of the fingers of the operator between it and the door. A short distance from the pivot an arm 12 is formed integral with the lever, being located substantially at right angles to the arm 9. The under side of arm 12 when the lever is vertically positioned is formed with a rounded cam surface 13, as shown, the purpose of which will also appear later.

The keeper comprises a base 14 attached to the casing 2 by screws 15 or like fastening means from which a post 16 extends outwardly for a short distance terminating in a

ead 17 which is extended downwardly for a istance below the lower edge of the post. he head on its outer sides is formed with wo curved surfaces 18 and 19 which come to point substantially at the front and be- ween the upper and lower ends of said head, hile on its inner side it is cut upwardly and nwardly at a slight angle to the vertical, orming a wedging cam 20, as shown.

The latch lever may be thrown to upper osition, as shown in Fig. 4, being stopped rom going beyond such position by engage- ent of the arm 9 with the lower shoulder made by post 5. It may also be carried to horizontal position, being likewise stopped hen it reaches such position by the upper houlder 5ª. When the door is moved oward closing position with the lever verti- ally located, the cam side 13 of arm 12 trikes against the curved upper side 18 of ead 17, causing the lever to be automati- ally swung toward the horizontal, and ringing the arm 9 into place so as to pass nder the lower point of the keeper head o that it may engage at its outer side gainst the wedging cam side 20 of the head. t is apparent that by giving the end of handle 11 a downward movement, the door ill be wedged tightly shut as the arm 9 oves upwardly and against the incline 20. o open the door it is merely necessary to grasp handle 11 and turn it to upper posi- ion, thus releasing the door, and the door may be opened at the same time by pulling outwardly on the handle after arm 9 has dis- connected from the keeper.

If the lever has dropped to horizontal po- sition while the door is open, the closure of the door and engagement of the lever with the keeper is accomplished by merely swing- ing the door shut, in which case, as shown in Figs. 6 and 7, the arm 9 strikes with its in- clined cam side 10 against the lower curved side 19 of the head 17 of the keeper, causing the handle to be automatically turned toward vertical position. This movement continues until the arm 9 passes by the lower point of the keeper head 17 or, as usually occurs, the arm 12 comes into contact with the head at the upper side 18, whereupon the lever is actuated so as to bring the arm 9 under the depending portion of the keeper, the same as before described when closing the door with the lever in vertical position. In any case, the latch lever engages with the latch keeper when the door is closed irrespective of the position of the lever. This is a fea- ture of merit in the invention and one of door is of value as use of one hand only is necessary for unlatching and drawing the door open. The ability to close the door and latch it automatically, irrespective of the position of the latch lever insures against in- jury to the latch or door and also insures that the door will be latched when it is swung shut. All of these features combined in the latch structure make it one of excep- tional merit.

We claim:

1. In combination, a door and a casing therefor, a keeper attached to the casing comprising a base, an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member attached to the door comprising a base, an integral outstanding post project- ing from the base and a laterally extending arm at the upper end of the post paralleling the base, and a latch lever pivotally mount- ed between its ends between the said arm and base of said member, said lever having one arm formed with an under cam side ex- tending from the pivot and adapted to be engaged under the depending portion of the keeper, a handle portion extending in the opposite direction from the pivot and an- other arm projecting from the handle por- tion a distance from the pivot and lying substantially at right angles to the first arm of the lever and likewise being formed with an inner cam side, substantially as and for the purposes described.

2. In combination, a door and a casing therefor, a keeper attached to the casing in- cluding an outer head spaced from the cas- ing and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member secured to the door, and a latch lever pivotally mounted between its ends on said member, said lever having one arm extended from the pivot adapted to ride against the lower outer side of the keeper head when the door is closed with the lever in horizontal position to automati- cally turn the lever to bring said arm back of the head, a handle portion extending in the opposite direction from said pivot and a second arm projecting from the handle portion at an angle to the first arm and adapted to ride against the upper outer side of the keeper when the door is closed with the lever positioned vertically to throw the

door and engageable with the keeper to hold the door in closed position, of means on the keeper and means on the latch lever to engage with the keeper on the outer sides thereof to swing the lever into engagement with the keeper at the inner side thereof when the door is closed with the lever occupying either a vertical or a horizontal position, substantially as described.

4. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the door and engageable with the keeper to hold the door in closed position, of two arms on the latch lever one of which is engaged with an outer portion of the keeper when the door is moved to closing position to swing the lever from a vertical position to a horizontal position and engage the other arm under the keeper, and the other of which is engaged with a different outer portion of the keeper when the door is moved to closing position and the lever is horizontal to turn the lever upwardly toward vertical position or until said other arm passes under and engages with the keeper to hold the door closed, substantially as described.

5. In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including one arm extending from the pivot, a handle portion extending in the opposite direction from the pivot, and a second arm extending from the handle portion adjacent the pivot and in a direction substantially at right angles to the first arm, substantially as described.

6. A latch containing the elements in combination defined in claim 5, said arms on their inner sides being formed with cam surfaces, substantially as described.

7. In combination, a door and a casing therefor, a keeper attached to the casing, a latch lever pivotally mounted on the door between its ends, one end of the lever being formed into an operating handle and the other into a keeper engaging arm, a second arm projecting from the handle portion of the lever a short distance from its pivot and at an angle to the first arm, said keeper being formed at its outer sides for engagement with the respective arms when the lever is in horizontal and vertical positions, respectively, as the door is closed, to automatically operate the lever so that it will engage under the keeper when the door is entirely closed, substantially as described.

In testimony whereof we affix our signatures.

ALEXANDER F. WINTERS.
BASIL R. CRAMPTON.

tween the upper and lower ends of said head, while on its inner side it is cut upwardly and inwardly at a slight angle to the vertical, forming a wedging cam 20, as shown.

The latch lever may be thrown to upper position, as shown in Fig. 4, being stopped from going beyond such position by engagement of the arm 9 with the lower shoulder 5^a made by post 5. It may also be carried to a horizontal position, being likewise stopped when it reaches such position by the upper shoulder 5^a. When the door is moved toward closing position with the lever vertically located, the cam side 13 of arm 12 strikes against the curved upper side 18 of head 17, causing the lever to be automatically swung toward the horizontal, and bringing the arm 9 into place so as to pass under the lower point of the keeper head so that it may engage at its outer side against the wedging cam side 20 of the head. It is apparent that by giving the end of handle 11 a downward movement, the door will be wedged tightly shut as the arm 9 moves upwardly and against the incline 20. To open the door it is merely necessary to grasp handle 11 and turn it to upper position, thus releasing the door, and the door may be opened at the same time by pulling outwardly on the handle after arm 9 has disconnected from the keeper.

If the lever has dropped to horizontal position while the door is open, the closure of the door and engagement of the lever with the keeper is accomplished by merely swinging the door shut, in which case, as shown in Figs. 6 and 7, the arm 9 strikes with its inclined cam side 10 against the lower curved side 19 of the head 17 of the keeper, causing the handle to be automatically turned toward vertical position. This movement continues until the arm 9 passes by the lower point of the keeper head 17 or, as usually occurs, the arm 12 comes into contact with the head at the upper side 18, whereupon the lever is actuated so as to bring the arm 9 under the depending portion of the keeper, the same as before described when closing the door with the lever in vertical position. In any case, the latch lever engages with the latch keeper when the door is closed irrespective of the position of the lever. This is a feature of merit in the invention and one of particular value from a practical standpoint when the latch is used on refrigerators.

This latch construction is very simple, consisting of but three parts and a pivot pin, all of which may be readily cast from metal or formed with proper dies from sheet metal. The mounting of the lever on the position of the latch lever insures against injury to the latch or door and also insures that the door will be latched when it is swung shut. All of these features combined in the latch structure make it one of exceptional merit.

We claim:

1. In combination, a door and a casing therefor, a keeper attached to the casing comprising a base, an outstanding post and a head at the outer portion of the post, said head depending below the post and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member attached to the door comprising a base, an integral outstanding post projecting from the base and a laterally extending arm at the upper end of the post paralleling the base, and a latch lever pivotally mounted between its ends between the said arm and base of said member, said lever having one arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper, a handle portion extending in the opposite direction from the pivot and another arm projecting from the handle portion a distance from the pivot and lying substantially at right angles to the first arm of the lever and likewise being formed with an inner cam side, substantially as and for the purposes described.

2. In combination, a door and a casing therefor, a keeper attached to the casing including an outer head spaced from the casing and formed with upper and lower curved outer sides coming substantially to a point and with an inner upwardly and inwardly inclined side, a member secured to the door, and a latch lever pivotally mounted between its ends on said member, said lever having one arm extended from the pivot adapted to ride against the lower outer side of the keeper head when the door is closed with the lever in horizontal position to automatically turn the lever to bring said arm back of the head, a handle portion extending in the opposite direction from said pivot and a second arm projecting from the handle portion at an angle to the first arm and adapted to ride against the upper outer side of the keeper when the door is closed with the lever positioned vertically to throw the lever to horizontal position and automatically engage the first arm with the keeper back of said head, substantially as described.

3. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the

thereof to swing the lever into engagement with the keeper at the inner side thereof when the door is closed with the lever occupying either a vertical or a horizontal position, substantially as described.

4. In combination with a door and casing therefor, of a keeper attached to the casing and a latch lever pivotally connected to the door and engageable with the keeper to hold the door in closed position, of two arms on the latch lever one of which is engaged with an outer portion of the keeper when the door is moved to closing position to swing the lever from a vertical position to a horizontal position and engage the other arm under the keeper, and the other of which is engaged with a different outer portion of the keeper when the door is moved to closing position and the lever is horizontal to turn the lever upwardly toward vertical position or until said other arm passes under and engages with the keeper to hold the door closed, substantially as described.

5. In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including the pivot and in a direction substantially at right angles to the first arm, substantially as described.

6. A latch containing the elements in combination defined in claim 5, said arms on their inner sides being formed with cam surfaces, substantially as described.

7. In combination, a door and a casing therefor, a keeper attached to the casing, a latch lever pivotally mounted on the door between its ends, one end of the lever being formed into an operating handle and the other into a keeper engaging arm, a second arm projecting from the handle portion of the lever a short distance from its pivot and at an angle to the first arm, said keeper being formed at its outer sides for engagement with the respective arms when the lever is in horizontal and vertical positions, respectively, as the door is closed, to automatically operate the lever so that it will engage under the keeper when the door is entirely closed, substantially as described.

In testimony whereof we affix our signatures.

ALEXANDER F. WINTERS.
BASIL R. CRAMPTON.

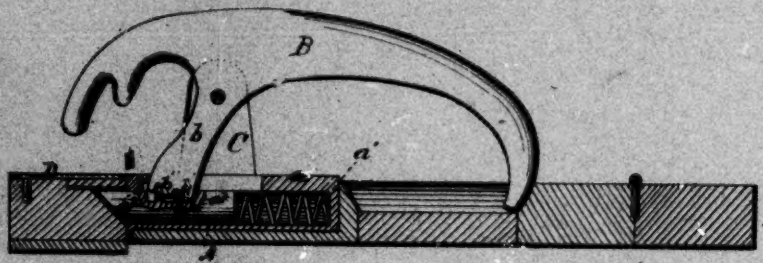
DEFENDANT'S EXHIBIT No. 15.

U. S. Patent No. 138,112 to J. Ambrun and E. Olfermann.

J. AMBRUN & E. OLFERMANN.

Door-Latch Handles.

No. 138,112. Patented April 22, 1873.



Witnesses.

Jos. C. Hutchinson

J. H. Hunter

Inventors.

J. Ambrun & E. Olfermann

Edson Brothers

UNITED STATES PATENT OFFICE.

JULIUS AMBRUN AND ERNST OLFERMANN, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN DOOR-LATCH HANDLES.

Specification forming part of Letters Patent No. **138,112**, dated April 22, 1873; application filed March 15, 1873.

To all whom it may concern:

Be it known that we, JULIUS AMBRUN and ERNST OLFERMANN, residing in Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and useful Improvement in Door-Bolts, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, in which is represented a view of our invention, with the lever in elevation and the bolt in section, the device being adjusted to a door set in a frame, which represents the upper surface of an ice-box or refrigerator.

This invention relates to that class of door-fastenings in which a sliding bolt is used; and the nature thereof consists in combining with such a bolt a lever or handle of such construction as to enable the bolt to be withdrawn from the socket or mortise in the door-jamb, and also to act as a pry to assist in opening the door, substantially as hereinafter more fully set forth.

To enable others to make and use our invention, we will proceed to describe it.

The sliding bolt A is confined within a cast-metal case, *a*, with lateral and end flanges, through which fastenings are inserted for securing the case to the door. The rear end of bolt A is pressed by a coiled spring, a^1, inclosed by the case *a*, and its upper surface is constructed with teeth a^2. B is a lever or handle, which is supplied upon its lower side with an arm, *b*, having teeth b^1, which take into the teeth a^2 of the bolt A for operating or throwing the latter inwardly. The lever B is fulcrumed upon posts or supports C, fastened to the top of the bolt-case *a* in any known way. The forward end of the lever B is caused to project or extend to a point opposite the door-jamb, and then curved or bent toward the same within a short distance thereof, as shown in the drawing. The object of this construction is to enable the lever or handle to act upon the door-jamb so as to pry the door open as the handle is grasped in unbolting the door.

This device can be used to great advantage in connection with ice-box and refrigerator doors.

To prevent the lever defacing or tearing the door-jamb in prying the door open, a metallic plate, D, is applied to the jamb. The rear arm of the lever is prolonged to enable it to be easily grasped and give it purchase.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination, with the sliding bolt A, of the lever or handle B *b*, of such construction as to act upon the door-jamb and pry the door open when the bolt is thrown in or withdrawn from the jamb, substantially as specified.

In testimony whereof we have signed the foregoing specification in presence of two subscribing witnesses.

JULIUS AMBRUN.
ERNST OLFERMANN.

Witnesses:
GEORGE SCHMITH,
JOHN BAUM.

DEFENDANT'S EXHIBIT No. 16.

U. S. Patent No. 62,078 to J. D. Simmons.

J. D. Simmons,

Sash Holder.

No. 62,078. Patented Feb. 12, 1867.

Fig: 2.

Fig: 1.

Witnesses:

A. Y. Coleman

Charles Alexander

Inventor:

J. D. Simmons

per

Alexander & Mason

Attorneys

United States Patent Office.

J. D. SIMMONS, OF QUINCY, ILLINOIS.

Letters Patent No. 62,078, *dated February* 12, 1867.

IMPROVED WINDOW-FASTENER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. D. SIMMONS, of the town of Quincy, county of Adams, and State of Illinois, have invented certain new and useful improvements in "Window-Fasteners," or Supporters, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon, making a part of this specification.

Figure 1 represents a vertical section.

Figure 2 represents a side view.

In the annexed drawings, A represents a metallic plate, having its edges turned at right angles, and two ears *m*, formed thereby near the top. This plate is made of any suitable length, and of a width so as to correspond with the thickness of the edge of the window sash. This plate has an opening in front of the ears *m*, to allow the curved back of the eccentric to pass. Secured to the ears by means of a pivot, *a*, is the eccentric or lever B. This device is made of metal, and in the form more fully shown in fig. 1, and, when in its natural position, extends beyond the face or side of the plate A, through its opening heretofore described. D represents a spring, which is connected to the plate A, near its lower end, and extends along the inner side thereof to the eccentric B, and under one end of the same. Connected to this spring, a short distance beneath the end of the eccentric, is a metal bar, *b*. This bar is secured to the springs at right angles, and passes through a small opening made in the plate for the purpose of catching in an opening made in the window frame, to prevent strain on the eccentric, and support the window in its required position. X represents a slot, cut near the top of the eccentric. This acts upon a corresponding notch made in the window frame, and supports the window when the sash fits snugly against the frame. When there is some "play" in the window, the slot X does not come in contact with the frame, but the curved back, by its peculiar shape and construction, is pressed against the frame by the spring, and effectually supports the window.

In the operation of this device, it is laced in an opening cut in the edge of the side of the window frame, and so that its face will be even with the edge or face of the frame. When the window is to be elevated, the handle *y* of the eccentric is elevated, (as shown in fig. 2,) which brings the curve of the said eccentric from against the side of the window, forcing the spring backwards, where it is caught by a wing, Z, formed in the eccentric. The window is then forced upwards to the height desired, and the handle let fall, which throws the curve against the frame, and supports the window.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The eccentric lever B, provided with the notch X, and the lug or wing Z, for the purpose of stopping the spring and preventing strain upon the same, in combination with the plate A, formed as described, and the spring D, provided with bar *b*, the whole arranged and used as and for the purpose specified.

As evidence that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses.

J. D. SIMMONS.

Witnesses:

WILLIAM E. AVISE,

W. M. BIRD.

DEFENDANT'S EXHIBIT No. 17.

U. S. Patent No. 934,253 to P. C. Wiest.

P. C. WIEST.

ANTIRATTLER FOR WINDOW SASHES.

APPLICATION FILED MAY 27, 1909.

934,253.

Patented Sept. 14, 1909

Fig. 1.

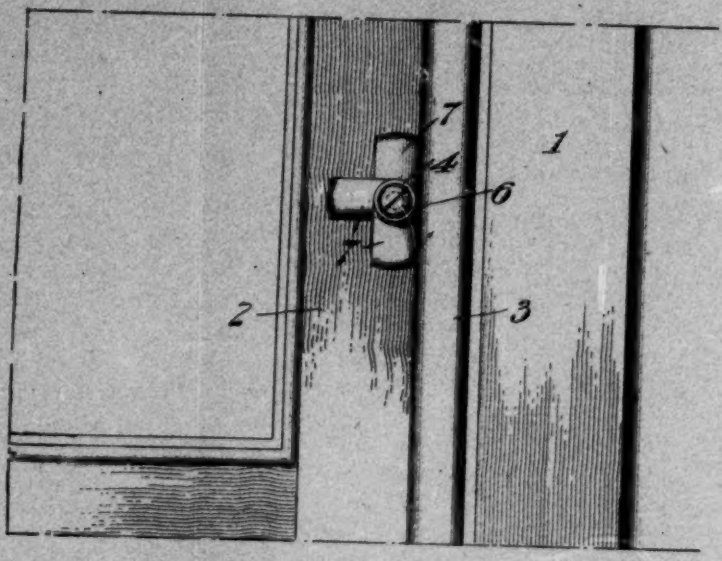
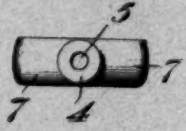


Fig. 2.

Fig. 3.



WITNESSES

T. L. Mockabee

Peter C. Wiest,
INVENTOR

Peter C. Wiest

UNITED STATES PATENT OFFICE.

PETER C. WIEST, OF YORK, PENNSYLVANIA.

ANTIRATTLER FOR WINDOW-SASHES.

934,253. Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed May 27, 1909. Serial No. 498,674.

To all whom it may concern:

Be it known that I, PETER C. WIEST, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a certain new and useful Antirattler for Window-Sashes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to antirattlers and fasteners for window sashes, the object in view being to provide a simple, cheap and practical device of the character referred to which may be readily carried in the pocket and quickly and easily applied in its position of use by persons having no special skill in the use of tools, and which, when in place, may be adjusted in such relation to a window sash and one of the window stops as to effectually prevent rattling of the sash and also prevent the ready movement of the sash in an attempt to force the same open.

With the above and other objects in view, the nature of which will fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is an elevation of a sufficient portion of a window sash and frame to illustrate the application of the present invention thereto. Fig. 2 is a detail view of the device, *per se*. Fig 3 is a detail view of the device in slightly modified form.

Referring to the drawings, 1 designates a window frame, 2 a sash, and 3 one of the window stops, said parts being of the ordinary construction and arrangement.

The antirattler and fastener comprises a central body or hub 4 which is provided with a central opening 5 for the reception of a fastener such as a screw 6, by means of which the device may be secured to a sash as shown in Fig. 1, the said screw acting as a pivot upon and around which the device is adapted to be turned for a purpose hereinafter described.

Projecting radially outward from the body or hub 4 is a plurality of wings 7 of suitable length to project one at a time between the stop 3 and the adjacent face of the window sash. In Fig. 2, three of such wings are shown, while in Fig. 3 two of such wings are illustrated. The number of these wings may be varied at will without departing from the principle of the invention. Each of the wings 7 is substantially wedge-shaped in cross section or in other words is thicker at one edge than the other in order that it may be wedged in between the stop and sash to take up all lost motion and lobseness and prevent the sash from rattling. To increase the utility and usefulness of the device, the wings are of different thicknesses as clearly indicated in Figs. 2 and 3, the thinnest wing being used where there is only a slight space between the sash and stop and the thickest wing being brought into use where there is a considerable space between the parts referred to, it being understood that any desired wing may be brought into use by turning the device as a whole upon its pivot until the proper wing is forced between the sash and stop.

In addition to its function as an antirattler, the device also acts as a fastener to prevent the raising of the sash by an unauthorized person.

The device may be readily removed from the sash when no longer needed and a number of the devices may be conveniently carried in the pocket.

I claim:—

A device of the class described, comprising a rotatable hub, and a plurality of wings radiating therefrom each wedge-shaped in cross section and varying in thickness one from another.

In testimony whereof I affix my signature in presence of two witnesses.

PETER C. WIEST.

Witnesses:
ROBERT S. SPANGLER,
ANDREW J. BRENNEMAN.

DEFENDANT'S EXHIBIT No. 18.

U. S. Patent No. 1,022,872 to E. Raaths.

E. RAATHS.

GATE LATCH.

APPLICATION FILED OCT. 7, 1911.

1,022,872.

Patented Apr. 9, 1912.

Fig. 1.

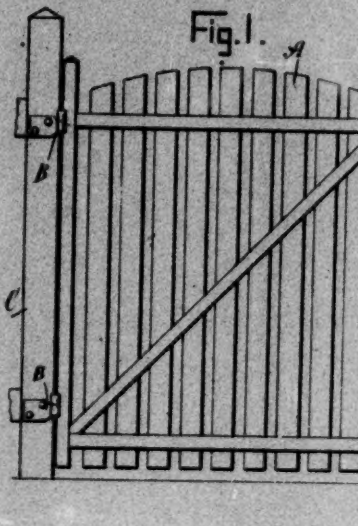


Fig. 2.

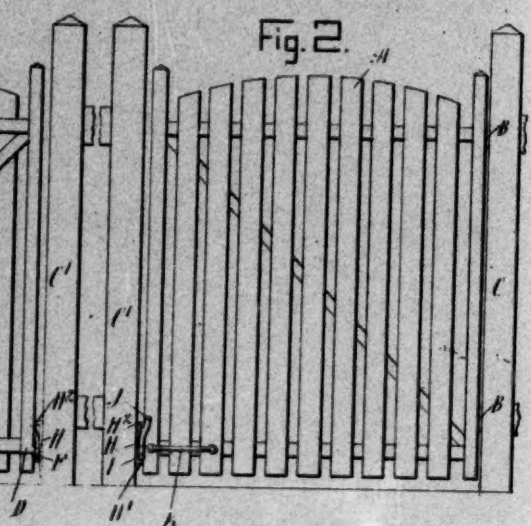
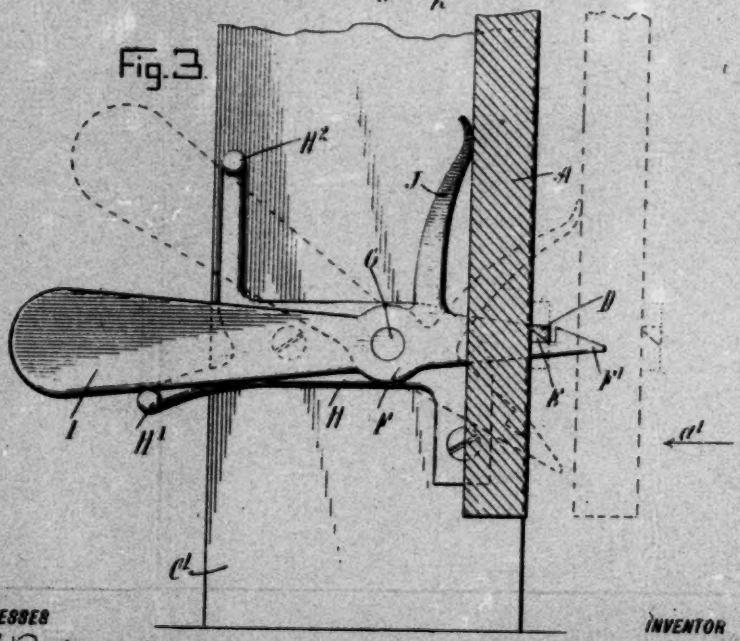


Fig. 3.



WITNESSES

C. K. Reichenbach.

INVENTOR

Ernest Raaths

BY

UNITED STATES PATENT OFFICE.

ERNEST RAATHS, OF ANGELICA, WISCONSIN, ASSIGNOR OF ONE-HALF TO ERNST H. BRAMSCHREIBER, OF ZACHOW, WISCONSIN.

GATE-LATCH.

1,022,872. Specification of Letters Patent. Patented Apr. 9, 1912.

Application filed October 7, 1911. Serial No. 653,384.

To all whom it may concern:

Be it known that I, ERNEST RAATHS, a citizen of the United States, and a resident of the town of Angelica, in the county of Shawano and State of Wisconsin, have invented a new and Improved Gate-Latch, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved gate latch arranged to permit conveniently opening or closing and locking the gate without the use of the hands, and to prevent hogs and cattle from opening the gate.

For the purpose mentioned, use is made of a latch lever fulcrumed on the gate post and having a notch for engagement with a keeper on the gate, the said latch lever also having an integral push arm adapted to engage the gate and swing the same open on imparting an opening movement to the latch lever.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of one side of the gate provided with the improved gate latch; Fig. 2 is a similar view of the other face of the gate provided with the gate latch; and Fig. 3 is an enlarged transverse section of the same.

The gate A on which the improved gate latch is used is connected by hinges B to a gate post C and on the free end of the gate A and near the bottom thereof is arranged a keeper D adapted to be engaged by a notch E formed in a latch lever F extending transversely and fulcrumed on a pivot G held on a latch plate H screwed or otherwise fastened to the inner side of the gate post C adjacent the free end of the gate A. The latch lever F is provided with a weighted arm I normally resting on a stop H' formed on the latch plate H, and the upward swinging movement of the weighted arm I is limited by a stop H² spaced from the stop H' and likewise forming part of the latch plate H. The latch lever F is further provided with an upwardly-extending bears against the face of the gate A, as will be readily understood by reference to Fig. 3, while the notch E is in engagement with the keeper D. A loop K is attached to the face of the gate A at the side opposite the one carrying the keeper D, the said loop being preferably located near the free end of the gate A and near the lower end thereof, as plainly indicated in Fig. 2. A person coming in the direction of the arrow *a'* and desiring to open the gate A needs only to press with one foot on the forwardly-projecting terminal F' of the latch lever F so as to swing the latch lever F downward and thereby disengage the notch E from the keeper D to unlock the gate. A further downward swinging movement of the latch lever F causes the push arm J to push the gate A open so that the person can walk through the opening between the gate posts. A person after passing through the open gate A engages one foot with the loop K and pulls the gate shut, it being understood that the latch lever F, after being relieved of pressure by the foot of the person as previously described, immediately swings back to normal position, as indicated in Fig. 3, and when the gate A is swung shut, as mentioned, the beveled top of the terminal F' slides under the keeper D, thus imparting a slight downward swinging motion to the lever F until the notch E registers with the keeper D, at which time the latch lever F is swung upward to its normal position by the action of the weighted arm I. The gate A is now again locked. A person coming in the inverse direction of the arrow *a'* lifts with his foot the weighted arm I so as to swing the latch lever F downward with a view to disengage the notch E from the keeper D and to cause the arm J to push the gate A open, as indicated in dotted lines in Fig. 3, to allow the person to walk through the open gate when in the inverse direction of the arrow *a'*. After having passed through the open gateway, it is only necessary for the person to give a return push to the gate A to cause the latch lever F to re-engage the keeper D in the manner above described.

From the foregoing it will be seen that

APPLICATION FILED OCT. 7, 1911.

1,022,872. **Patented Apr. 9, 1912.**

Fig. 1.

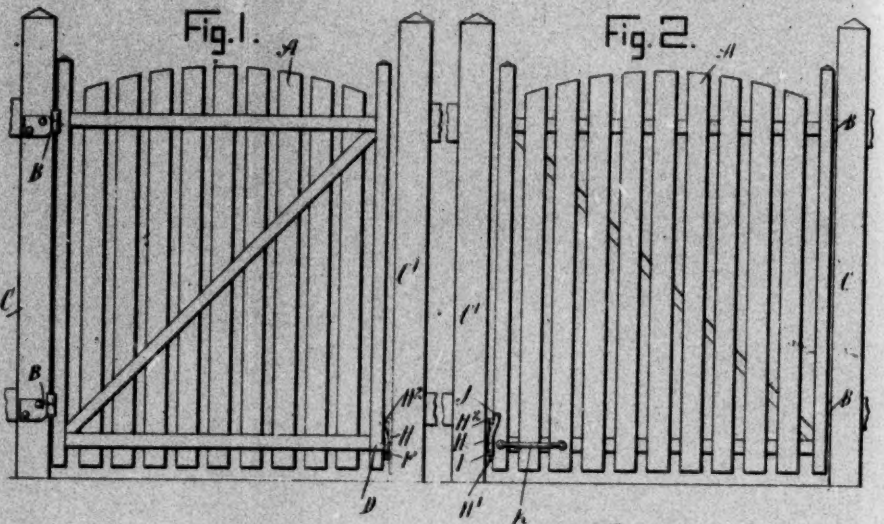
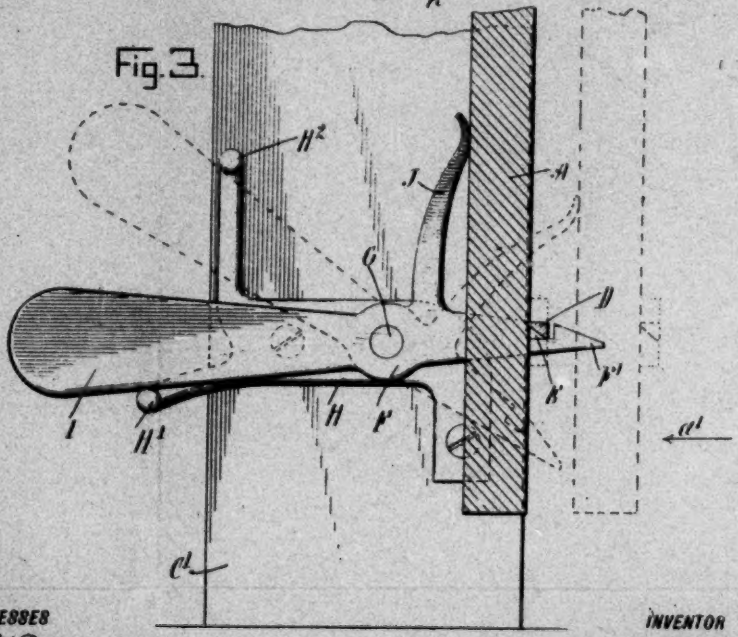


Fig. 2.

Fig. 3.



WITNESSES

C. F. Parkenbach.

Rud. Hoch Jr.

INVENTOR

Ernest Raaths

BY Munn & Co.

ATTORNEYS

GATE-LATCH.

1,022,872. Specification of Letters Patent. Patented Apr. 9, 1912.

Application filed October 7, 1911. Serial No. 653,384.

To all whom it may concern:

Be it known that I, ERNEST RAATHS, a citizen of the United States, and a resident of the town of Angelica, in the county of Shawano and State of Wisconsin, have invented a new and Improved Gate-Latch, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved gate latch arranged to permit conveniently opening or closing and locking the gate without the use of the hands, and to prevent hogs and cattle from opening the gate.

For the purpose mentioned, use is made of a latch lever fulcrumed on the gate post and having a notch for engagement with a keeper on the gate, the said latch lever also having an integral push arm adapted to engage the gate and swing the same open on imparting an opening movement to the latch lever.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of one side of the gate provided with the improved gate latch; Fig. 2 is a similar view of the other face of the gate provided with the gate latch; and Fig. 3 is an enlarged transverse section of the same.

The gate A on which the improved gate latch is used is connected by hinges B to a gate post C and on the free end of the gate A and near the bottom thereof is arranged a keeper D adapted to be engaged by a notch E formed in a latch lever F extending transversely and fulcrumed on a pivot G held on a latch plate H screwed or otherwise fastened to the inner side of the gate post C′ adjacent the free end of the gate A. The latch lever F is provided with a weighted arm I normally resting on a stop H′ formed on the latch plate H, and the upward swinging movement of the weighted arm I is limited by a stop H² spaced from the stop H′ and likewise forming part of the latch plate H. The latch lever F is further provided with an upwardly-extending arm J adapted to engage the face of the gate A opposite the one carrying the keeper D, so that when the gate A is in a closed position the free end of the push arm J bears against the face of the gate A, as will be readily understood by reference to Fig. 3, while the notch E is in engagement with the keeper D. A loop K is attached to the face of the gate A at the side opposite the one carrying the keeper D, the said loop being preferably located near the free end of the gate A and near the lower end thereof, as plainly indicated in Fig. 2. A person coming in the direction of the arrow *a′* and desiring to open the gate A needs only to press with one foot on the forwardly-projecting terminal F′ of the latch lever F so as to swing the latch lever F downward and thereby disengage the notch E from the keeper D to unlock the gate. A further downward swinging movement of the latch lever F causes the push arm J to push the gate A open so that the person can walk through the opening between the gate posts. A person after passing through the open gate A engages one foot with the loop K and pulls the gate shut, it being understood that the latch lever F, after being relieved of pressure by the foot of the person as previously described, immediately swings back to normal position, as indicated in Fig. 3, and when the gate A is swung shut, as mentioned, the beveled top of the terminal F′ slides under the keeper D, thus imparting a slight downward swinging motion to the lever F until the notch E registers with the keeper D, at which time the latch lever F is swung upward to its normal position by the action of the weighted arm I. The gate A is now again locked. A person coming in the inverse direction of the arrow *a′* lifts with his foot the weighted arm I so as to swing the latch lever F downward with a view to disengage the notch E from the keeper D and to cause the arm J to push the gate A open, as indicated in dotted lines in Fig. 3, to allow the person to walk through the open gate when in the inverse direction of the arrow *a′*. After having passed through the open gateway, it is only necessary for the person to give a return push to the gate A to cause the latch lever F to re-engage the keeper D in the manner above described.

From the foregoing it will be seen that the gate latch shown and described is very simple and durable in construction and composed of comparatively few parts, not liable easily to get out of order. It will also be

noticed that the gate is normally securely locked in position and cannot be opened by hogs or cattle, and a person coming in either direction can readily open the gate without the use of the hands.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In combination with a swing gate and gate post, of a keeper fixed on the gate, a latch plate fixed on the gate post and provided with spaced stops, a latch lever fulcrumed on the said latch plate and provided with a notch adapted to engage the said keeper, the said latch lever having a weighted arm for engagement with the said stops and the latch lever having a push arm for engagement with the gate when the notch end of the latch lever is swung downward.

2. In combination with a swing gate and gate post, of a keeper on the gate, and a latch lever fulcrumed on the gate post and having a notch for engagement with the said keeper, the said latch lever also having an integral push arm adapted to engage the gate and swing the same open on imparting an opening movement to the latch lever.

3. In combination with a swing gate and gate post, a keeper fixed on the gate, a latch plate fixed on the gate post and provided with spaced stops, a latch lever fulcrumed on the said latch plate and provided with a notch adapted to engage the said keeper, the said latch lever having a weighted arm for engagement with the said stops and the latch lever having a push arm for engagement with the gate when the notch end of the latch lever is swung downward, and a loop fixed on the said gate at the side at which the said weighted arm is arranged.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST RAATHS.

Witnesses:
R. C. Wendt.
J. E. Lutsey.

DEFENDANT'S EXHIBIT No. 19.

U. S. Patent No. 1,250,736 to A. D. Ward.

A. D. WARD.

REFRIGERATOR DOOR LOCK.

APPLICATION FILED FEB. 1, 1917.

1,250,736.

Patented Dec. 18, 1917.

Fig. 1.

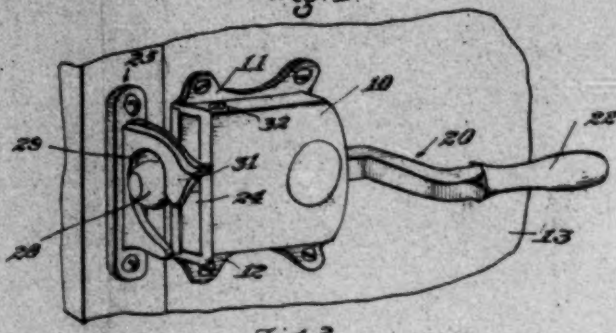


Fig. 2.

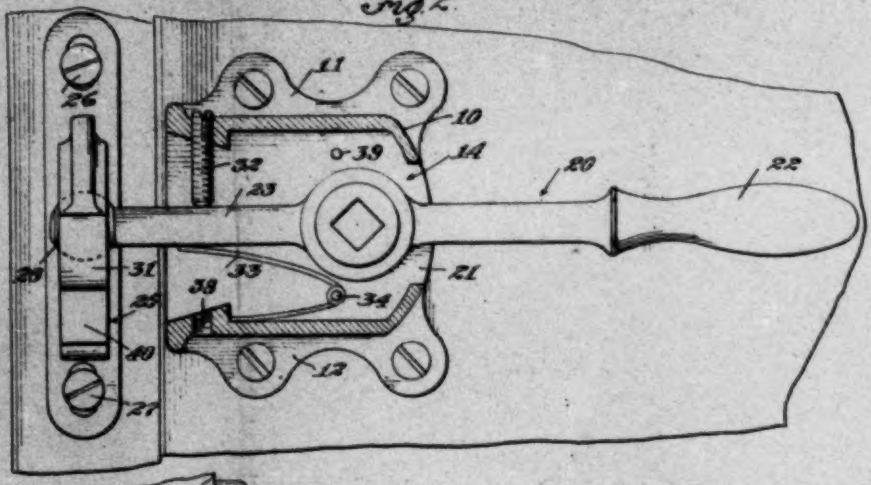


Fig. 3.

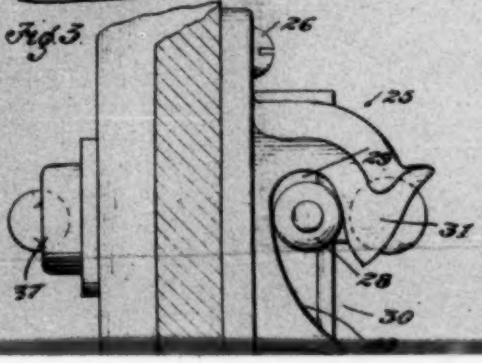
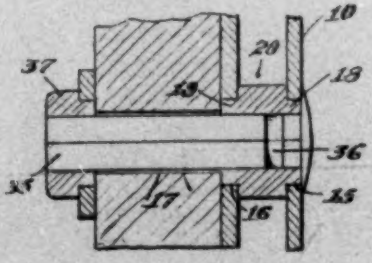


Fig. 4.



UNITED STATES PATENT OFFICE.

ABRAHAM D. WARD, OF LOS ANGELES, CALIFORNIA.

REFRIGERATOR-DOOR LOCK.

1,250,736. Specification of Letters Patent. Patented Dec. 18, 1917.

Application filed February 1, 1917. Serial No. 145,987.

To all whom it may concern:

Be it known that I, ABRAHAM D. WARD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Refrigerator-Door Locks, of which the following is a specification.

This invention relates to a door lock and particularly pertains to a latch for refrigerator doors and the like.

The locks used on most refrigerator doors are so constructed as to wedge the doors into a closed and sealed position. When it is desired to open the doors, however, great force must be used to break the seal and cause the door to swing outwardly to its open position. It is the principal object of this invention to provide a door latch which will act to tightly close the door and when actuated in a reverse manner will act to break the seal and open the door so that there will be no difficulty experienced in tightly closing the door or opening it thereafter.

Another object of this invention is to provide a door latch which is formed of few parts and which may be easily actuated by means of a single actuating lever to either open or close the door.

Another object of this invention is to provide a lock of the above class which possesses a bolt so constructed as to not become wedged within the keeper and not liable to wear either the keeper or the bolt member.

It is a further object of this invention to provide a lock which is decidedly strong in construction and which will act in an automatic manner to lock and close or open and unlock a door by slight movement of a single locking lever.

Other objects will appear hereinafter.

The invention is illustrated, by way of example, in the accompanying drawings in which:

Figure 1 is a view in perspective illustrating the latch in its locked position upon a larly illustrating the peculiar formation of the bolt keeper.

Fig. 4 is a view in transverse section illustrating the manner in which the operating handle is mounted within its casing.

Referring more particularly to the drawings, 10 indicates a lock casing which is here shown as substantially rectangular in shape and provided with outwardly extending flanges 11 and 12 by which it may be secured to the face of a door 13. The sectional configuration of the lock housing is channel shape forming an opened side or back which is adapted to be fitted with a back plate 14 held in place by the housing. The front plate of the housing is formed with a circular bore 15 which is in horizontal alinement with a bore 16 formed through the back plate of the lock and in communication with a passage-way 17 extending through the door. The two bores are provided to receive trunnions 18 and 19 formed upon opposite sides of the central boss of a lock handle 20. This handle extends rearwardly from the boss through an opening 21 in the end of the lock housing and is there formed with a handle grip 22 by which the lock may be operated. A lock bolt 23 is formed integral with the handle and extends in alinement therewith through an end opening 24 in the housing. This bolt is of a length sufficient to permit it to extend across the edge of the door and to engage a bolt keeper 25 secured by screws 26 and 27 to the door post. The end of the lock bolt 23 is provided with a roller ball 28 which allows the bolt to be actuated without appreciable friction.

Reference being had to Fig. 3 it will be seen that the keeper is of peculiar configuration and is an essential feature of the invention. As shown, an arcuate roller slot 29 is formed by the keeper and is of a width approximately that of the diameter of the roller ball 28. This slot has an opening 30 at its lower end, through which the ball 28 may pass. The walls of the slot leading from the opening upon inward

APPLICATION FILED FEB. 1, 1917.

1,250,736. Patented Dec. 18, 1917.

Fig. 1.

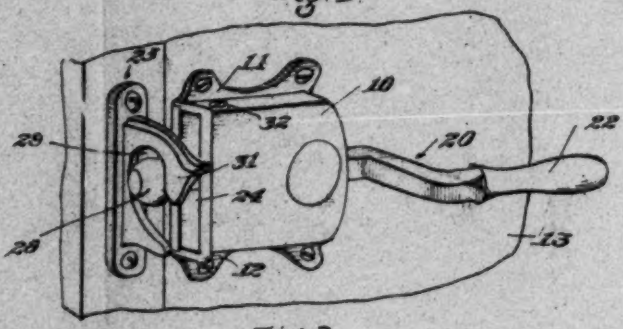


Fig. 2.

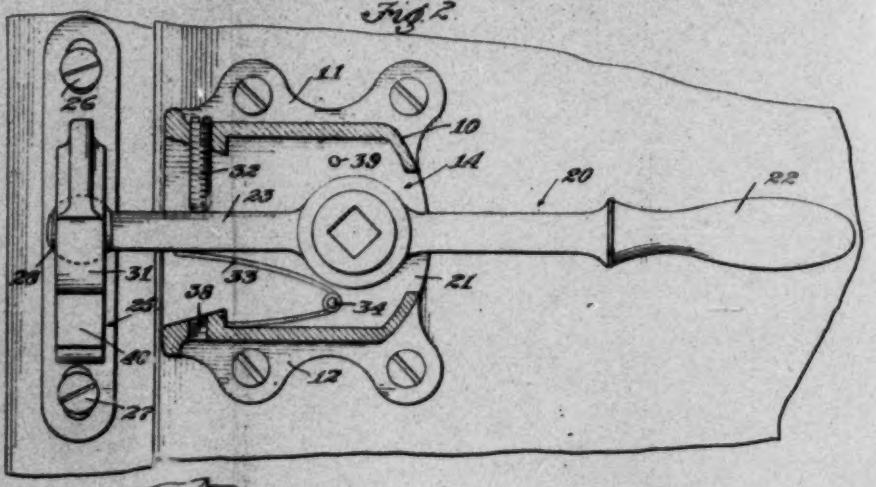


Fig. 3

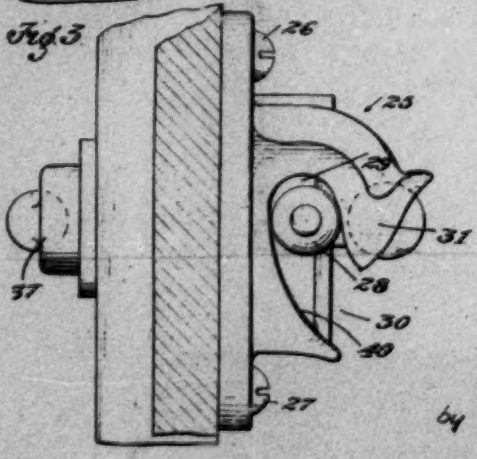
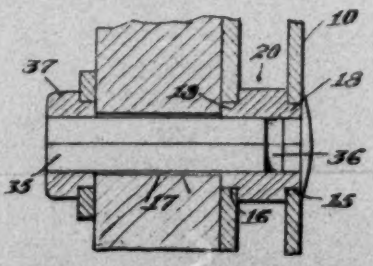


Fig. 4.



Inventor.
Abraham D. Ward.
by Hazard & Miller
Attys

ABRAHAM D. WARD, OF LOS ANGELES, CALIFORNIA.

REFRIGERATOR-DOOR LOCK.

1,250,736. Specification of Letters Patent. Patented Dec. 18, 1917.

Application filed February 1, 1917. Serial No. 145,987.

To all whom it may concern:

Be it known that I, ABRAHAM D. WARD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Refrigerator-Door Locks, of which the following is a specification.

This invention relates to a door lock and particularly pertains to a latch for refrigerator doors and the like.

The locks used on most refrigerator doors are so constructed as to wedge the doors into a closed and sealed position. When it is desired to open the doors, however, great force must be used to break the seal and cause the door to swing outwardly to its open position. It is the principal object of this invention to provide a door latch which will act to tightly close the door and when actuated in a reverse manner will act to break the seal and open the door so that there will be no difficulty experienced in tightly closing the door or opening it thereafter.

Another object of this invention is to provide a door latch which is formed of few parts and which may be easily actuated by means of a single actuating lever to either open or close the door.

Another object of this invention is to provide a lock of the above class which possesses a bolt so constructed as to not become wedged within the keeper and not liable to wear either the keeper or the bolt member.

It is a further object of this invention to provide a lock which is decidedly strong in construction and which will act in an automatic manner to lock and close or open and unlock a door by slight movement of a single locking lever.

Other objects will appear hereinafter.

The invention is illustrated, by way of example, in the accompanying drawings in which:

Figure 1 is a view in perspective illustrating the latch in its locked position upon a refrigerator.

Fig. 2 is a view in front elevation with parts broken away to more clearly illustrate the latch construction and its movement of operation.

Fig. 3 is a view in end elevation particularly illustrating the peculiar formation of the bolt keeper.

Fig. 4 is a view in transverse section illustrating the manner in which the operating handle is mounted within its casing.

Referring more particularly to the drawings, 10 indicates a lock casing which is here shown as substantially rectangular in shape and provided with outwardly extending flanges 11 and 12 by which it may be secured to the face of a door 13. The sectional configuration of the lock housing is channel shape forming an opened side or back which is adapted to be fitted with a back plate 14 held in place by the housing. The front plate of the housing is formed with a circular bore 15 which is in horizontal alinement with a bore 16 formed through the back plate of the lock and in communication with a passage-way 17 extending through the door. The two bores are provided to receive trunnions 18 and 19 formed upon opposite sides of the central boss of a lock handle 20. This handle extends rearwardly from the boss through an opening 21 in the end of the lock housing and is there formed with a handle grip 22 by which the lock may be operated. A lock bolt 23 is formed integral with the handle and extends in alinement therewith through an end opening 24 in the housing. This bolt is of a length sufficient to permit it to extend across the edge of the door and to engage a bolt keeper 25 secured by screws 26 and 27 to the door post. The end of the lock bolt 23 is provided with a roller ball 28 which allows the bolt to be actuated without appreciable friction.

Reference being had to Fig. 3 it will be seen that the keeper is of peculiar configuration and is an essential feature of the invention. As shown, an arcuate roller slot 29 is formed by the keeper and is of a width approximately that of the diameter of the roller ball 28. This slot has an opening 30 at its lower end, through which the ball 28 may pass. The walls of the slot leading from the opening taper inwardly and upwardly and cause the door to be drawn inwardly to a tightly closed position as it is locked. The upper portion of the keeper surrounding the throat of the arcuate slot is formed with a horn 31 which tapers inwardly and downwardly in a manner to de-

press the ball roller 28 when closing the door and to lead it into the slot without manipulation of the lock handle.

As a means for adjusting the sealing and locking action of the lock, an adjusting screw 32 is provided and is here shown as extending downwardly through the upper side wall of the lock housing to bear against the upper face of the lock bolt. The bolt 23 is held against the screw 32 by means of a leaf spring 33 which is mounted upon a pin 34 extending outwardly from the back plate of the lock. When the draw of the lock is to be increased the spring 33 is relieved from the lock bolt 23 and will cause the roller 28 to move farther into the throat of the groove 29 as the door is locked. This, as will be seen, causes the door to be drawn forcibly into its closed position and more thoroughly sealed.

In order to permit the door to be locked and unlocked from the interior of the refrigerator or room, a square pin 35 is positioned within a socket 36 in the lock handle. This pin extends through the opening 17 in the door and is fitted with an actuating handle 37 which is secured to the end of the pin and upon the opposite side of the door from the lock, thus permitting the lock to be readily actuated from the side of the door.

Attention is directed to the fact that the parts of this lock are reversible as in some locations and for some uses it would be desirable to pull downwardly upon the handle 20 when opening the door instead of upwardly as here shown. In this case the keeper 25 is inverted so that its throat opening will be above the normal locked position of the bolt. In order to cause the lock bolt to properly seat within the keeper when so inverted the adjusting screw 32 is positioned through a threaded opening 38 in the lower side wall of the lock housing and the leaf spring 33 is mounted upon a pin 39 extending from the back plate and positioned above the lock bolt, as will be evident.

When the lock is mounted upon a door the back plate and lock housing are secured by means of suitable screws to the face of the door and the keeper is fastened upon the face of the door post. The screw 32 is then adjusted to bring the bolt 23 and handle 20 in substantial horizontal alinement, after which the keeper is moved vertically, due to the clearance afforded by the screw slots in its bolting flange. When proper adjustment has been made to permit the door to properly seal the screws 26 and 27 are tightened and the lock is ready for use. Attention is directed to the fact that it is important to normally locate the keeper so that the face

In operation the door is closed. As it reaches its closed position the roller 28 will strike the forward downwardly tapering face of the horn 31 and will be led downwardly and into the slot 29, after which the lock handle may be depressed and this will force the ball 28 along the rear face of the horn 31 to seal the door. When the door is opened the roller will bear upon the face of the arcuate slot and as it is moved downwardly it will naturally be advanced to cause the door to partially open, thus breaking the seal and allowing the door to be thereafter easily handled.

It will thus be seen that the lock here provided will act in an effective manner to simultaneously lock and clamp a door in position and when its operation is reversed will simultaneously unlock and open the door with the use of a single lever and by a single movement.

While I have shown the preferred construction of my lock as now known to me, it will be understood that various changes in the combination, construction and arrangement of parts may be made by those skilled in the art without departing from the spirit of my invention.

I claim:

1. A refrigerator door lock comprising a casing having opposite screw seats and opposite spring seats, a lock handle having a boss within the casing, trunnions extending from the boss forwardly and backwardly into recesses in the casing to pivotally mount the handle, a lock bolt extending from the boss in the opposite direction from the handle centrally between the screw seats and between the spring seats and projecting from the casing, an adjusting screw adapted to be mounted through either screw seat to engage the lock bolt and limit the motion of the bolt in one direction, and a spring adapted to be mounted in either spring seat to press the bolt against the adjusting screw, the arrangement of the casing, adjusting screw and spring being such that the screw and spring may be moved from one side to the other of the bolt to operate the bolt in either direction as desired and make the lock reversible.

2. A refrigerator door lock comprising a casing adapted to be mounted against the face of a door having opposite screw seats and opposite spring seats, a handle having a central boss provided with trunnions extending both ways into recesses in the casing to pivotally mount the handle, a lock bolt extending from the central boss between the screw seats and between the spring seats roller ball mounted upon the

spring seat to press the lock bolt against the set screw, the spring and set screw being thus reversible to change the direction of the lock bolt as desired, and a bolt keeper adapted to be mounted upon the frame of the door and adapted to be engaged by the roller tip of the lock bolt, said keeper having an inclined horn leading to an arcuate roller slot so that the roller ball will pass the horn to the slot when the door is slammed shut and so that when the roller ball is in the slot, operation of the handle will force the door closed or open as desired.

In testimony whereof I have signed my name to this specification.

ABRAHAM D. WARD.

As a means for adjusting the sealing and locking action of the lock, an adjusting screw 32 is provided and is here shown as extending downwardly through the upper side wall of the lock housing to bear against the upper face of the lock bolt. The bolt 23 is held against the screw 32 by means of a leaf spring 33 which is mounted upon a pin 34 extending outwardly from the back plate of the lock. When the draw of the lock is to be increased the spring 33 is relieved from the lock bolt 23 and will cause the roller 28 to move farther into the throat of the groove 29 as the door is locked. This, as will be seen, causes the door to be drawn forcibly into its closed position and more thoroughly sealed.

In order to permit the door to be locked and unlocked from the interior of the refrigerator or room, a square pin 35 is positioned within a socket 36 in the lock handle. This pin extends through the opening 17 in the door and is fitted with an actuating handle 37 which is secured to the end of the pin and upon the opposite side of the door from the lock, thus permitting the lock to be readily actuated from the side of the door.

Attention is directed to the fact that the parts of this lock are reversible as in some locations and for some uses it would be desirable to pull downwardly upon the handle 20 when opening the door instead of upwardly as here shown. In this case the keeper 25 is inverted so that its throat opening will be above the normal locked position of the bolt. In order to cause the lock bolt to properly seat within the keeper when so inverted the adjusting screw 32 is positioned through a threaded opening 38 in the lower side wall of the lock housing and the leaf spring 33 is mounted upon a pin 39 extending from the back plate and positioned above the lock bolt, as will be evident.

When the lock is mounted upon a door the back plate and lock housing are secured by means of suitable screws to the face of the door and the keeper is fastened upon the face of the door post. The screw 32 is then adjusted to bring the bolt 23 and handle 20 in substantial horizontal alinement, after which the keeper is moved vertically, due to the clearance afforded by the screw slots in its bolting flange. When proper adjustment has been made to permit the door to properly seal the screws 26 and 27 are tightened and the lock is ready for use. Attention is directed to the fact that it is important to normally locate the keeper so that the face of the horn 31 will strike the center of the roller 28 substantially midway its length and thereby insure that the roller will be properly led into the arcuate locking slot.

face of the horn 31 and will be ... wardly and into the slot 29, after which the lock handle may be depressed and this will force the ball 28 along the rear face of the horn 31 to seal the door. When the door is opened the roller will bear upon the face of the arcuate slot and as it is moved downwardly it will naturally be advanced to cause the door to partially open, thus breaking the seal and allowing the door to be thereafter easily handled.

It will thus be seen that the lock here provided will act in an effective manner to simultaneously lock and clamp a door in position and when its operation is reversed will simultaneously unlock and open the door with the use of a single lever and by a single movement.

While I have shown the preferred construction of my lock as now known to me, it will be understood that various changes in the combination, construction and arrangement of parts may be made by those skilled in the art without departing from the spirit of my invention.

I claim:

1. A refrigerator door lock comprising a casing having opposite screw seats and opposite spring seats, a lock handle having a boss within the casing, trunnions extending from the boss forwardly and backwardly into recesses in the casing to pivotally mount the handle, a lock bolt extending from the boss in the opposite direction from the handle centrally between the screw seats and between the spring seats and projecting from the casing, an adjusting screw adapted to be mounted through either screw seat to engage the lock bolt and limit the motion of the bolt in one direction, and a spring adapted to be mounted in either spring seat to press the bolt against the adjusting screw, the arrangement of the casing, adjusting screw and spring being such that the screw and spring may be moved from one side to the other of the bolt to operate the bolt in either direction as desired and make the lock reversible.

2. A refrigerator door lock comprising a casing adapted to be mounted against the face of a door having opposite screw seats and opposite spring seats, a handle having a central boss provided with trunnions extending both ways into recesses in the casing to pivotally mount the handle, a lock bolt extending from the central boss between the screw seats and between the spring seats, a roller ball mounted upon the tip of the lock bolt, a set screw adapted to be adjustably mounted through either screw seat to limit the swinging of the lock bolt in one direction, a spring adapted to be mounted in either

spring seat to press the lock bolt against the set screw, the spring and set screw being thus reversible to change the direction of the lock bolt as desired, and a bolt keeper adapted to be mounted upon the frame of the door and adapted to be engaged by the roller tip of the lock bolt, said keeper having an inclined horn leading to an arcuate roller slot so that the roller ball will pass the horn to the slot when the door is slammed shut and so that when the roller ball is in the slot, operation of the handle will force the door closed or open as desired.

In testimony whereof I have signed my name to this specification.

ABRAHAM D. WARD.

PATENT TO
I. D. SIMMONS
FEB. 12. 1867
#62.078.

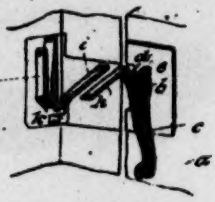


Fig. 5.

PATENT TO
A. CHARLES.
JUNE 10. 1902
#702.186.

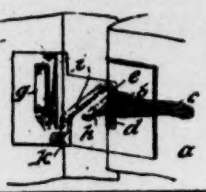


Fig. 6.

Fig. 1.

PATENT TO
P. C. WIEST.
SEPT. 14. 1909
#934.253.

Fig. 2.

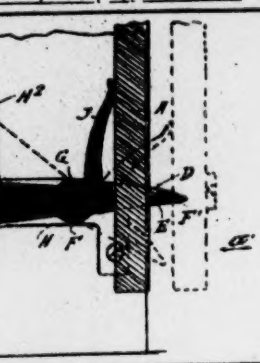
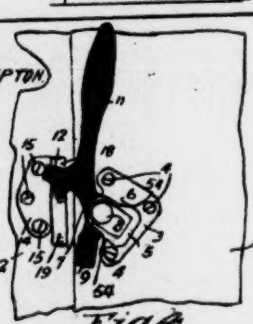


Fig. 3.

PATENT TO
E. RAATHS.
APRIL-9. 1912
#1.022.872



PATENT TO
WINTERS & CRAMPTON
JULY-19. 1921
#1,385.102

Fig. 4.

Winters & Crampton Patent #1,385,102,
Claims 5 and 6.

5. In a latch of the character described, a supporting member adapted to be attached to a door, and a latch lever pivotally mounted between its ends thereon, said lever including one arm extending from the pivot, a handle portion extending in the opposite direction from the pivot, and a second arm extending from the handle portion adjacent the pivot and in a direction substantially at right angles to the first arm, substantially as described.

6. A latch containing the elements in combination defined in claim 5, said arms on their inner sides being formed with cam surfaces, substantially as described.

DEFENDANT'S EXHIBIT No. 20.

Colored Plate Showing Lever Marked in Red.

DEFENDANT'S EXHIBIT No. 21.

Colored Plate Showing Arrangement and Parts of Latch Structure as Made by Dent Hardware Company.

IN THE

United States Circuit Court of Appeals

FOR THE THIRD CIRCUIT

No. 3727 (List No. 91)

OCTOBER TERM, 1927

ALEXANDER F. WINTERS, et al.,
Appellants,

vs.

DENT HARDWARE COMPANY,
Appellee.

And afterwards, to wit, on the ninth day of January, 1928, come the parties aforesaid by their counsel aforesaid, and this case being called for argument sur pleadings and briefs, before the Honorable Joseph Buffington, Honorable Victor B. Woolley and Honorable J. Warren Davis, Circuit Judges, and the Court not being fully advised in the premises, takes further time for the consideration thereof,

And afterwards, to wit, on the fourth day of October, 1928, come the parties aforesaid by their counsel aforesaid, and the Court, now being fully advised in the premises, renders the following decision:

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE THIRD CIRCUIT

No. 3727

OCTOBER TERM, 1927

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON,

Appellants,

VS.

DENT HARDWARE COMPANY,

Appellee.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF PENNSYLVANIA.

(Filed October 4, 1928)

Before BUFFINGTON, WOOLEY and DAVIS, *Circuit Judges.*

DAVIS, *Circuit Judge.*

This is an appeal from a decree of the District Court dismissing the bill of complaint charging the defendant with infringing United States Letters Patent No. 1,385,102 issued to Alexander F. Winters and Basil R. Crampton July 19, 1921. All seven of the claims were alleged to have been infringed. The Court held claims 1, 2, 3, 4 and 7 to be valid but not infringed and claims 5 and 6, which plaintiffs sought to withdraw, invalid.

The appellants brought suit against the Sanitary Refrigerator Company for the infringement of the patent

in question in the United States District Court for the Eastern District of Wisconsin. That court held all seven claims valid and infringed. An appeal was taken to the Circuit Court of Appeals for the Seventh Circuit. There, the patentees conceded that claims 5 and 6 were invalid and the appellee here concedes that the other claims are valid if limited to the specific structure disclosed, and when so limited, it says it does not infringe.

Claims 1 and 7 are typical. They disclose in combination a door, a casing or joint, a keeper attached to the casing and a latch lever attached to the door rather than to the casing.

The patentees proceeded upon the assumption that latch levers of this general type in the prior art were all attached to the casing and that one of the novel inclosures in their patent was the transposition of the latch from the casing to the door and the keeper from the door to the casing. They say in their specifications:

> "The swinging lever latch, or as it is better known, the Condit latch, is pivotally connected at one end of the door jamb or casing, allowing the door to be opened when the latch is thrown to an upper vertical position, and coming down across the meeting edges of the casing and door when swung to horizontal position, engaging with a cam member on the door to wedge the door tightly shut. This latch is a very serviceable latch but is relatively hard to operate due to its attachment to the casing instead of the door, and the same is liable to drop to horizontal position in which case the door cannot be closed without first raising the lever to upper vertical position while, many times, the door is inadvertently swung toward closed position and against the lever in its horizontal position with injury either to the lever or door or both. In the present invention, it is a primary object and purpose

to provide a latch which may be pivotally connected to the door and which is automatically operated to engage with a retaining member or keeper fixed on the door casing when the door is closed irrespective of the vertical or horizontal position of the latch lever, working as well in the one case as the other. . . . The mounting of the lever on the door is of value as use of one hand only is necessary for unlatching and drawing the door open. The ability to close the door and latch it automatically, irrespective of the position of the latch lever insures against injury to the latch or door and also insures that the door will be latched when it is swung shut."

The patents, however, to Keil, No. 564,448; to Dent, No. 67,506; to Schaeder, Nos. 1,117,709 and 1,170,685 and to Ward, No. 1,250,736, shows latches on the door and keepers on the casing. So there is nothing new in the transposition by the patentees of the latch from the casing to the door. Neither is there anything new or novel in the door or casing as such. Patentable novelty, therefore, must be found, if at all, in the particular form or function of the keeper or latch or in both.

The keeper in the Keil patent is strikingly similar in both form and function to that of the patent in suit. In Keil, the keeper has a base attached to the casing by three screws. From this base a post extends outwardly for a short distance and terminates in a triangular head, which on the under side extends downwardly for a distance below the lower edge of the post. The head of the latch is the apex of the triangle. The two sides terminating in the head are practically straight while those of the patent in question are somewhat curved. From the apex of the keeper when attached to the casing, one of the triangular sides extends upwardly and the other downwardly. The inner or lower side is cut upwardly and somewhat inwardly at a slight angle

to the vertical, forming a wedging cam. This meagre description reads equally well on the keeper of either the Keil patent or the patent in suit.

The function of every part of the Keil keeper is practically identical with that of the keeper of the patent in question. One or the other of the arms of the latch lever of the Keil latch slides down on the lower triangular side of the keeper when the door is being closed. Which one of these two arms contacts with this lower side depends upon the position in which the latch lever is when the door is closed. The function performed by the plaintiffs' keeper and the Keil keeper in co-operation with the latch levers is the same function performed by keepers generally in the prior art patents. Only one of the sides of the Keil keeper, however, engages the arms of the latch lever and serves as a cam to direct the lever when the door is closed, but this is due to the design of the arms of the levers and not to difference in principle of operation.

The next question concerns the latch lever. Judge Evans in construing this patent in the Circuit Court of Appeals for the Seventh Circuit said that, "patentable novelty resides in the structural differences of the latches (either in the keeper member or latch member or both)." The latch lever of the patent is about four inches long. A pin is run through the lever about one inch from the end which engages the keeper. This serves as a pivot or fulcrum. This latch lever is really a handle having two right angled arms near the pivot. One is the extension of handle beyond the pivot and the other is at right angles to it. In operation one of these two arms "is engaged with an outer portion of the keeper when the door is moved to closing position to swing the

lever from a vertical position to a horizontal and engage the other arm under the keeper, and the other (arm) of which is engaged with a different outer portion of the keeper when the door is moved to closing position and the lever is horizontal to run the lever upwardly toward vertical position or until said upper arm passes under and engages with the keeper to hold the door closed." These general features and functions of latch levers were old in the art.

The lever in the Keil patent has the general features of the plaintiffs' lever. It will lock when the door is closed whether the lever is in a horizontal, vertical or an intermediate position, because of the co-operation of the two arms 4 and 5 of the lever latch with the keeper "to force the door tightly to" when it is shut. The keeper is mounted on the door casing just as in the patent in suit. The latch lever is pivotally mounted between its ends on the door. One of the ends forms the operating handle and the other contains two arms one or the other of which engages the cam on the keeper when the door is closed.

The elements common to the devices of Keil and the plaintiffs are: a door, a casing, a keeper attached to the casing, a lever latch pivotally attached to the door, means on the keeper to engage the arms of the latch and means on the latch to engage with the keeper. The two arms of the engaging end of the Keil lever, however, are in the same parallel plane while the two arms on the plaintiffs' lever are at right angles, but both perform the same function, and this difference is one of design and not of principle of operation.

The Charles Patent, No. 702,185, issued June 10, 1902, shows a device having a latch lever corresponding in its

essential features with the plaintiffs'. It has a handle portion which may stand in a horizontal, vertical or intermediate position. There are two arms on the other end, one extending beyond the pivot or fulcrum and the other substantially at right angles to it. The function of these arms, coacting with the keeper, is to fasten the door when it is shut and to hold it in a closed position. This latch considered as a design structure is somewhat different from the plaintiffs', but functionally both are substantially the same.

The function of the arms generally is to trip, or give a kick to the latch lever by the coaction of the arms with the keeper when the door is closed. The object of all these tripping devices, which are numerous and old in the art, is to fasten the door and hold it in a closed position regardless of the position of the lever when the closing operation begins.

The art was crowded with latches that automatically lock when the door is closed when this patent to Winters and Crampton was issued. In addition to the patents to Keil and Charles, there are patents involving the same general features and functions to Dent, No. 670,506 (1900); to Schrader, No. 1,117,709 (1914), No. 1,170,685 (1915), No. 1,265,120 (1917), and to Ward, No. 1,250,736. In speaking for the Circuit Court of Appeals for the Seventh Circuit, Judge Evans said of the plaintiffs' patent:

> "Whether the other claims (than 5 and 6 admitted to be invalid) are infringed depends entirely upon the position of the patent in suit in the art. No difficulty would be experienced in finding infringement if the patent were a pioneer or was one covering such an improvement as entitled it to a broad range of equivalency. But the patent does not occu-

> py any such position. It is an extremely narrow one as a reading of the claims at once discloses. Moreover, the record shows a prior art loaded with latches possessing some of the features of appellee's latch . . . Patentable novelty, if any exists, is restricted to the particular structure disclosed . . . The precise question then is, does appellant avoid infringement by placing a lug on the near side of the head of its keeper, the surface of which is curved similarly to the outer surface of its head and which is adapted to contract with the arm projecting from the handle portion of its lever? Concede the existence of claims that are narrow and restricted to structural design only, yet even in such claims there must be some range of equivalency."

Counsel sought to withdraw claims 5 and 6, but Judge Dickinson declared them to be invalid. We have grave doubt as to the validity of the other claims, but if they are valid, their scope is clearly confined to the structural design disclosed.

The question then arises, does the defendant's device infringe the structural design which plaintiffs' patent discloses?

The defendant's device has a keeper attached to the casing of the door and a latch attached to the door, but they are quite different in design from the plaintiffs'. The defendant's keeper is old. It has an outstanding post and a head depending below the post and with upper and lower curved outer sides coming substantially to a point, but it has a lug on the near side of the triangular head. The plaintiffs' keeper does not have this.

The latch of the defendant has one arm formed with an under cam side extending from the pivot and adapted to be engaged under the depending portion of the keeper, but its other arm is entirely unlike it in form. This arm

contacts with the lug on the keeper and this causes the lever to swing and lock when the door is closed. The upper triangular side of this keeper performs no function when the door is closed. For anything that it does, it might as well not be there. It does not coact at all with the latch, but the same side in the plaintiffs' does.

Both the design and function of the defendant's latch and keeper are unlike those of the plaintiffs'. They cannot be said to infringe unless they come within the narrow range of equivalency of a design patent entering a crowded art. Structural design claims have some "range of equivalency," but that range must be as narrow as the invention itself. Is the lug outstanding from the head of defendant's keeper equivalent to the upper triangular side of the plaintiffs' keeper? It certainly is not in structure. It performs a similar function just as do the sides of many keepers of the prior art. Neither does defendant's latch have any arm corresponding in design to the upper arm of plaintiffs' latch. If the patent in suit were a pioneer patent and originated the trip or kick that locks the door when it is closed, then the defendant's device might infringe. The patent would be entitled to a broad construction and wide range of equivalency. But it came into an already crowded art with many patents having various devices involving arms, cams, lugs, projections, protuberances and all sorts of contrivances for holding the door in a closed position when it was shut.

The same range of equivalency here contended for by the plaintiffs, so as to include the defendant's structure, would bring plaintiffs' patent invalid for want of patentable novelty over the prior art or holding it valid but limited to the particular structure disclosed which does

not include the defendant's device within its range of equivalency.

The purpose of the patent laws is to reward those who make some substantial discovery or invention which adds to knowledge and takes a step in advance in the procession of the useful arts. It is not the object of those laws to grant a monopoly for every trifling device, every shadow or shade of an idea which would naturally and spontaneously occur to any mechanic skilled in the art. The patent laws never intended to lay such a heavy tax upon the industry of the country without seeing that some real contribution was made to the advancement of the useful arts. Atlantic Works vs. Brady, 107 U. S. 192,200. We think that the structure of the defendant's latch and keeper are so unlike those of the plaintiffs' that they do not come within the range of equivalency necessary to constitute infringement. With great respect we are constrained to reach a different conclusion from the Circuit Court of Appeals for the Seventh Circuit.

The decree of the District Court dismissing the bill because of non-infringement is affirmed.

Attest: A true copy.

Clerk.

IN THE

United States Circuit Court of Appeals

FOR THE THIRD CIRCUIT

No. 3727 (List No. 91)

OCTOBER TERM, 1927

ALEXANDER F. WINTERS, et al.,
Appellants,

vs.

DENT HARDWARE COMPANY,
Appellee.

Appeal from the District Court of the United States, for the Eastern District of Pennsylvania.

This cause came on to be heard on the transcript of record from the District Court of the United States, for the Eastern District of Pennsylvania, and was argued by counsel.

On consideration whereof, it is now here ordered, adjudged, and decreed by this Court that the decree of the said District Court in this cause be, and the same is hereby affirmed, with costs.

Philadelphia, October 4, 1928.

J. WARREN DAVIS,
Circuit Judge.

Endorsements:
3727
Order Affirming Decree
Received and Filed
October 4, 1928
William P. Rowland, Clerk

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE THIRD CIRCUIT

No. 3727

OCTOBER TERM, 1927

ALEXANDER F. WINTERS AND BASIL R. CRAMPTON,

Appellants,

VS.

DENT HARDWARE COMPANY,

Appellee.

PETITION FOR REHEARING

To the Honorable, the Judges of the said court:

The petition of Alexander F. Winters and Basil R. Crampton, appellants, respectfully represents:

That they are the appellants in the cause above entitled, that the same was argued on the 9th day of January, 1928, before Circuit Judges Buffington, Woolley and Davis, and decided October 4, 1928, in an opinion by Davis, C. J., affirming the decree of the lower court, holding claims 5 and 6 to be invalid and that the remaining claims numbered 1, 2, 3, 4 and 7 of patent No. 1,385,102, issued to said appellants are not infringed by the structure manufactured and sold by the Dent Hardware Company.

Your petitioners submitting themselves at all times to the judgment of the court, respectfully suggest, as to certain findings of fact and certain conclusions of laws founded thereon in said opinion, which will be hereafter specified, there is manifest error in the opinion and decree of your honorable court in the above entitled cause and the same ought to be set aside and the cause reheard for the following reasons:

(1). That there was error in the court's understanding of what appellants' invention is and what appellants improved upon in its statement that:

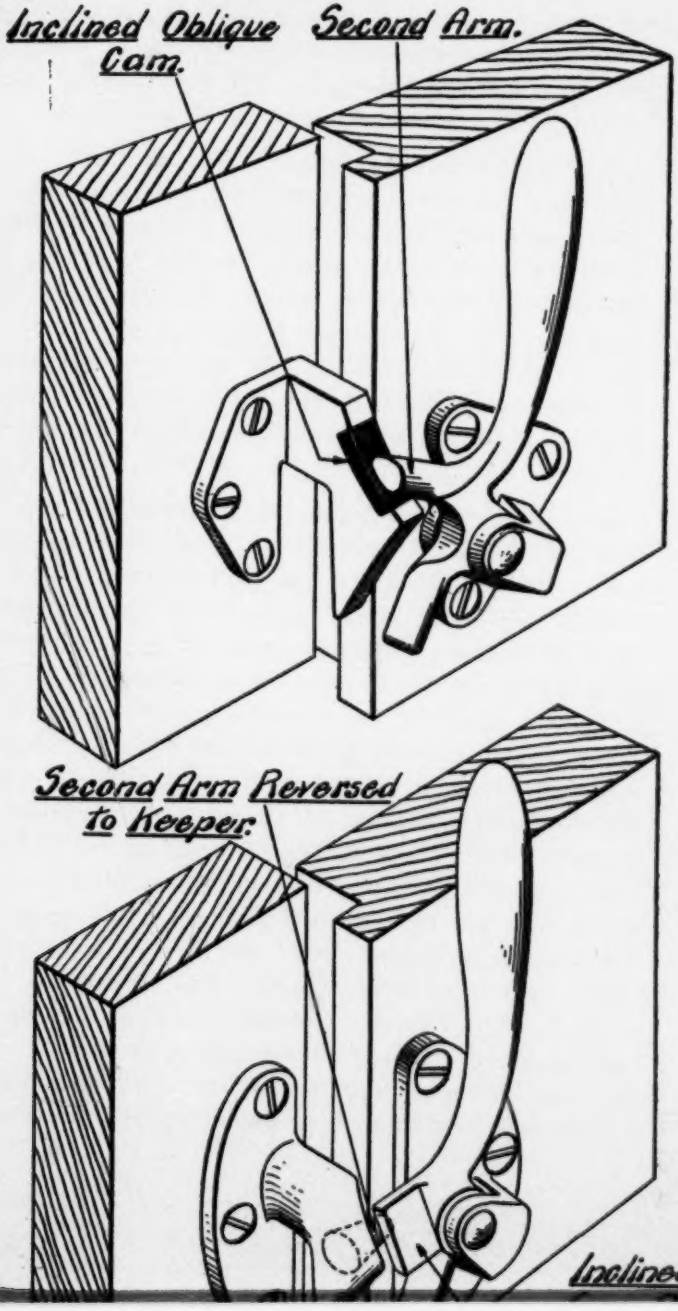
> "The patentees proceeded upon the assumption that latch levers of this general type in the prior art were attached to the casing and that one of the novel disclosures in their patent was the transposition of the latch from the casing to the door and the keeper from the door to the casing."

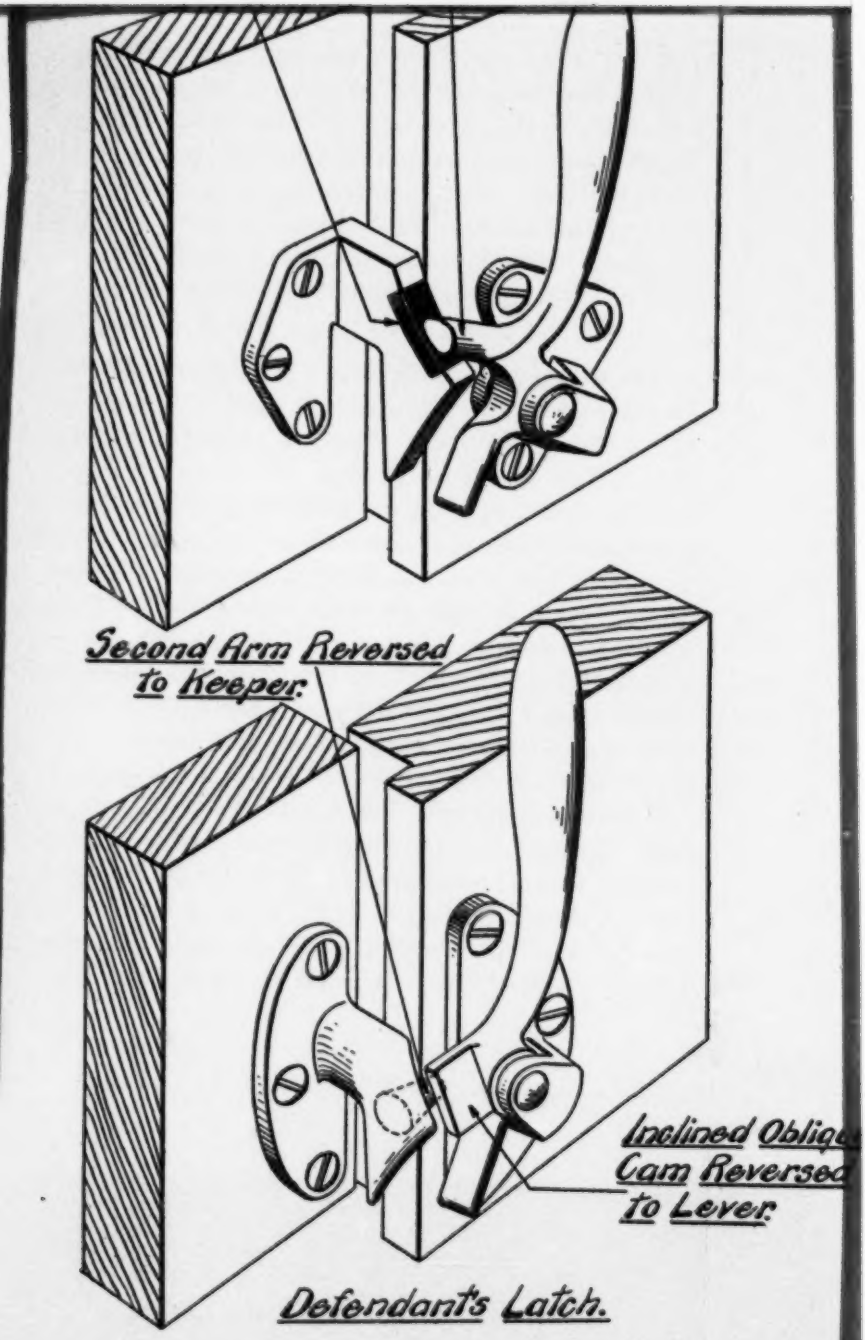
As a matter of fact the quotation from the specification of the patent, appearing in the opinion immediately following this statement, shows that the improvement was to be made in latches of the Condit type. The swinging lever latch of said Condit latch is mounted on the door jamb or casing, swings between vertical and horizontal positions in a plane parallel to the front of the door and door casing and, in horizontal position, comes down across the meeting edges of the casing and the door, this being further set forth as undesirable should the lever drop to horizontal position when the door is open with a result that the door strikes against the latch lever lying horizontally partly across the door opening and in the path of the door when it is moved toward closed position.

There was no assumption and no claim was made by the patentees that they had made the first latch in which a latch lever was mounted on a door and a keeper mounted on a door casing. Latches of the Keil and Dent drop handle type and of the spring actuated type manufactured not only by the Dent Hardware Company, shown by the various Schraeder patents, but also previously manufactured by the appellants themselves were well known as having been attached to the door while the keeper for the lever was attached to the door casing. The invention consisted in making such constructions and modifications and changes, making a new latch which would render it possible to use a swinging lever latch of the Condit type, of which the Charles patent No. 702,185, referred to in the opinion (page 5), is an example, could have its disadvantages removed, or like disadvantages overcome in the improved form of the Charles structure, as is shown in the Schraeder patent No. 1,114,296 (R. p. 128), which actually was the type of Condit latch on the market, made not only by the Dent Company but by several other manufacturers of refrigerator latches, and which it was the object and purpose of appellants to improve so as to obviate injury to the latch or door or both should the latch lever drop to horizontal position, indicated in dotted lines of Fig. 1 of the Schraeder patent (R. p. 128), when the door was open.

Necessarily, the patent was not of broad and comprehensive scope, was not a pioneer in latches, was not a pioneer in attaching a pivoted latch lever to a door, but it was contended to be the first to pivotally connect a swinging lever between its ends on the door to swing in a plane parallel to the face of the door, with limiting stops for the lever to stop it in either a vertical or hori-

Plaintiffs' Latch





Defendant's Latch.

zontal position, and with co-operating means between the lever and keeper for automatically engaging the lever with the keeper on swinging the door closed, irrespective of which position the lever might be in.

(2). That the court, accordingly, while entirely correct in its finding that the patent was not a pioneer, nevertheless gave it entirely too restricted and limited a scope and failed to observe the actual identity between the latch of the plaintiffs' patent and that manufactured by the defendant appellee, the identity being the same as that appearing in a case of the Supreme Court of the United States, the Union Paper Bag Machine Company and Samuel Cupples vs. Merrick Murphy, et al., 24 Law Ed., 935, 95 U. S. 935.

There is opposite a drawing showing in the upper figure plaintiffs' latch, in the lower figure the latch of the Dent Hardware Company. There is identity in the fixture attached to the door in each case said fixture having a base, an outwardly extending post and an overhanging arm parallel to the base. The lever in each case is pivotally mounted between the base and arm at a point between its ends so as to provide an operating handle at one side of the pivot and a keeper engaging arm at the other side and the lever swings parallel to the front side of the door. The levers in handle engaging against the upper side of the outwardly extending post when the lever is horizontal, and the arm which is in alignment with the handle engaging against the other side of the post when the lever is vertical. The keepers in both constructions have these features in common: A base to be attached to the door jamb, an outwardly extending post and a depending hook against the rear side of which and under said post the arm in

alignment with the handle in the latch lever is to engage when the door is latched in closed position. They also have in common a curved under side or edge of the substantially triangular shaped head, against which the arm in alignment with the handle of the latch lever rides when the handle is in horizontal position on closing the door to swing the handle part of the lever upwardly and bring said arm part of the lever into position to come back of the hook.

There is this further feature in common though in specifically different forms in the two latches, all of the previous things which have been defined as in common being identical in every respect. In plaintiffs' latch at the upper side or edge of the triangular shaped head is an oblique cam surface and on the lever and projecting substantially at right angles therefrom is a second arm to engage with said cam surface for swinging the lever to keeper engaging position should it occupy a vertical position when the door is closed. In the defendants' device there is a lug projecting from a side of the head and there is an inclined oblique cam on the lever. In actuality *the inclined oblique cam on the head of plaintiffs' device has been transferred to the lever* and *the second arm in plaintiffs' device has been transferred to the keeper.* This is the merest reversal of parts that can be done, and which all courts following the decision of the Union Paper Bag Machine Co., et al., vs. Merrick Murphy, et al., supra, have considered as being merely formal alterations of a plaintiff's patented construction and so identical in every respect as to come within the scope of even the most specific claims that a patentee may have. In the Supreme Court case cited the art was old, paper bag machines had been made for twenty years,

they had been constructed by many persons and in various forms and with more or less utility. Neither party in the case claimed to be the original and first inventor of an entire machine of the kind.

In the patent in said Supreme Court case, the cutter was movable, was lifted vertically, descended by its own weight and was sufficient to cause the paper to be cut by the cutter. In the charged infringing machine the knife was stationary, a weight in the form of a straight piece of metal was lifted and then thrown down sharply to make a vertical blow upon the paper to cause the knife to cut the paper as effectively as the cutter did in the complainant's machine. That is, a knife and a striker were used in both machines. In the patent the striker was stationary and the knife moved against it with the paper between, and in the infringing machine the knife was stationary and the striker was moved against it with the paper between, a mere reversal in position, but there was relative movement of the knife and the striker in both cases.

In plaintiffs' machine the second arm, so-called, is on the lever and movable to engage with a stationary cam at the upper edge of the triangular shaped head of the keeper. In the defendant's device these parts are reversed and the arm is put on and projected from the head and is stationary and the cam to co-operate therewith is transferred to the lever and is movable. The relative movement of one to the other in both cases is identical, the same effect is produced by the same means and by the same principle of operation and irrespective of how restricted the interpretation is to be given to the claims 1, 2, 3, 4 and 7 it is submitted there must be found infringement because of strict identity as defined by the

leading case of United States Supreme Court on this point, which has been followed by inferior courts, as in Anchor Cap & Closure Corp. vs. Prichard, 232 Fed. 156; Delvin, et al. vs. Paynter, et al., 64 Fed. 398-400; Brislin vs. Carnegie Steel Co., 118 Fed. 591; Union Steel Pump Co. vs. Battle Creek Steel Pump Co., 104 Fed. 342; and numerous others which might be cited almost indefinitely. While the decision in Anchor Cap & Closure Co. vs. Prichard was of a District Court it was by Judge Learned Hand, now of the Circuit Court of Appeals for the Second Circuit. The patent was No. 874,201 and apparently was a very specific one, for the court said:

> "It is quite possible that the scope of the patent must be held *strictly to the disclosure itself;* but that question is academic here for the defendant has copied the machine faithfully, except for the *mere reversal of parts.*"

It is submitted that there must be a finding of infringement even of the most specific claims of the claims 1, 2, 3, 4 and 7 of plaintiffs' patent, if said claims are valid at all, for there has been this mere reversal in position of the cam and arm noted, which under the controlling authority of the Supreme Court of the United States means that there is identity absolute in every respect.

For the foregoing reasons it is respectfully requested that the petition for rehearing be granted by the court, and if it shall seem proper, such modification or reversal of the decree entered as justice and right may require.

ALEXANDER F. WINTERS, and
BASIL R. CRAMPTON.
By FRANK E. LIVERANCE, JR.,
For Appellants.

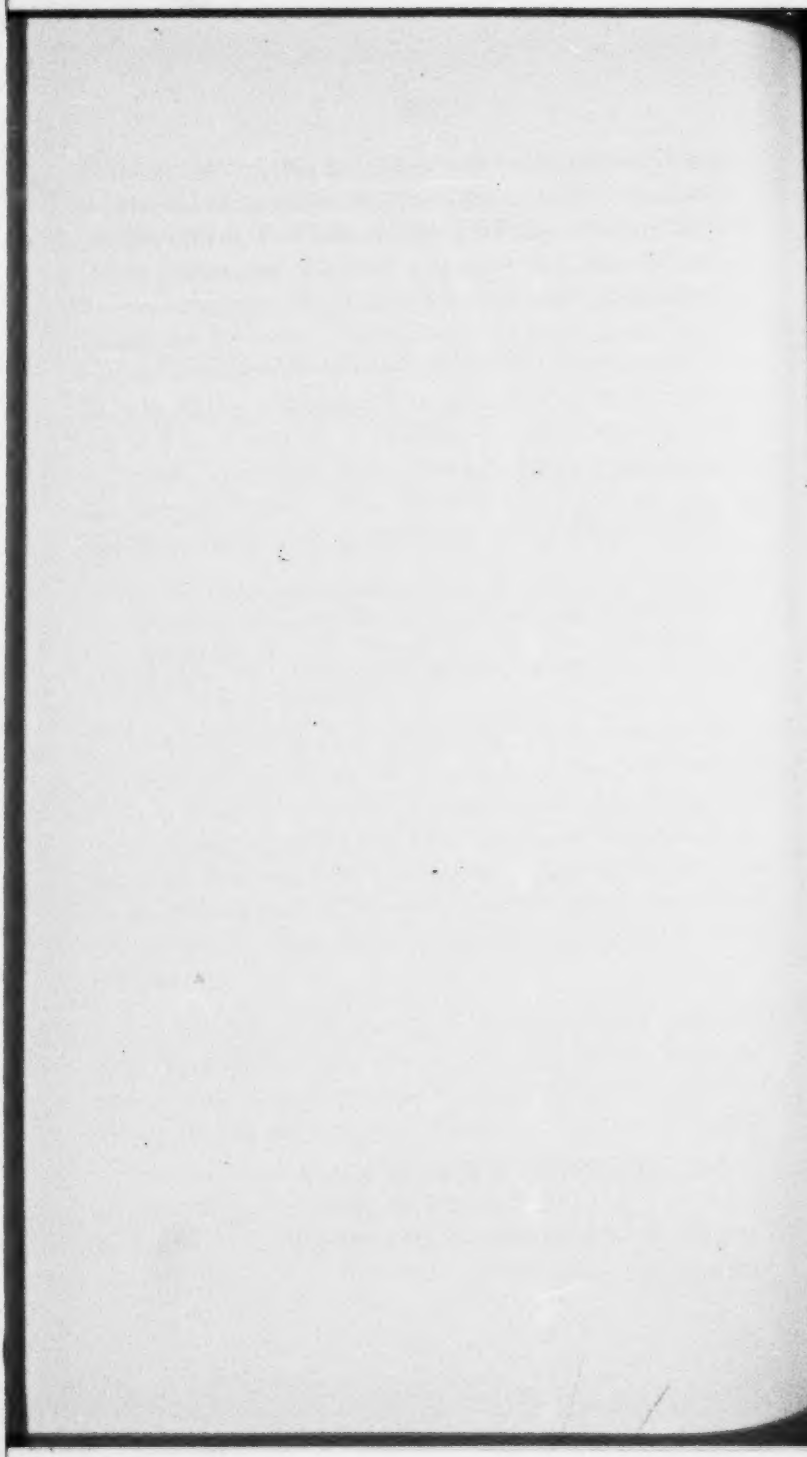
I hereby certify that the foregoing petition is made in good faith and not for any purpose of delay, and is based on good and substantial grounds and that, in my opinion, justice and right require that the cause should be reheard and the decree corrected.

FRANK E. LIVERANCE, JR.,

Counsel for Appellants.

Grand Rapids, Michigan.

October 10, 1928.



IN THE

United States Circuit Court of Appeals

FOR THE THIRD CIRCUIT

No. 3727

OCTOBER TERM, 1928

ALEXANDER F. WINTERS and BASIL R. CRAMPTON,

Appellants,

vs.

DENT HARDWARE COMPANY,

Appellee.

MEMORANDUM FOR DENT HARDWARE COMPANY, APPELLEE, CONTRA PETITION FOR REHEARING.

Appellants' petition seems to be merely an application to reargue and rehash the same matter which this Court held under advisement for between eight and nine months and decided, having before it the opinion of the Chicago Circuit Court of Appeals and appellants' elaborate brief based on substantially the same line of argument set up in the petition. Nothing new has been adduced and for this reason alone, the petition should be denied.

A further reason for denial is the fact that every item here in controversy or involved in this petition (which is the validity or scope of the claims of the Winters and Crampton patent and their infringement) will be passed on by the Supreme Court probably by the forepart of December about six weeks hence.

Counsel for appellee here, filed a petition for a certiorari to the Chicago Court of Appeals last spring basing said petition on the conflict of the decision of said Chicago Court of Appeals with Judge Dickinson's decision herein, the opinion of this Court not being filed until October 4, 1928. Counsel for appellee immediately moved the Supreme Court for leave to file the opinion of this Court, the motion being noticed for October 8th, 1928. On that day the Supreme Court denied the petition for certiorari. The writer immediately on October 11th, 1928, filed a petition for rehearing attaching thereto the opinion of the Chicago Court of Appeals and the opinion of this Court filed October 4th, 1928.

On October 15th the Supreme Court granted said petition for rehearing and ordered certiorari to issue to the Chicago Court of Appeals. The certified order reads as follows:

SUPREME COURT OF THE UNITED STATES

No. 128. October Term, 1928.

Sanitary Refrigerator Company,
Petitioner,

vs.

Alexander F. Winters and Basil C. Crampton.

Memorandum for Dent Hardware Company, Appellee, Contra Petition for Rehearing

ON CONSIDERATION of the petition for rehearing filed herein,

IT IS NOW HERE ORDERED BY THIS COURT that the said petition be, and the same is hereby, granted. The order entered October 8, 1928, denying the petition for a writ of certiorari herein is revoked, and a writ of certiorari in this cause is granted.

A TRUE COPY:

Attest:

CHARLES ELMORE CROPLEY,
Clerk of the Supreme Court
of the United States.

We are informed by the clerk of the Supreme Court in a letter dated October 18th that the above case No. 128 will be reached for argument the last of November or the forepart of December, 1928.

In view of the foregoing, it is respectfully submitted that this petition for rehearing should be denied.

E. HAYWARD FAIRBANKS,
Counsel for Appellee.

IN THE

United States Circuit Court of Appeals

FOR THE THIRD CIRCUIT

No. 3727 (List No. 91)

ALEXANDER F. WINTERS, et al.,
Appellants,

vs.

DENT HARDWARE COMPANY,
Appellee.

SUR PETITION FOR REHEARING

AND NOW, to wit: October 31, 1928, after due consideration, the petition for rehearing in the above entitled case is hereby denied.

Philadelphia,

J. WARREN DAVIS,
Circuit Judge.

Endorsements:
3727
Order Denying Petition for
Rehearing
Received and Filed
October 31, 1928
Saunders Lewis, Jr., Clerk

UNITED STATES OF AMERICA.

Eastern District of Pennsylvania.

THIRD JUDICIAL CIRCUIT.

Set.

I, William P. Rowland, Clerk of the United States Circuit Court of Appeals, for the Third Circuit, DO HEREBY CERTIFY the foregoing to be a true and faithful copy of the original transcript of record and proceedings in this Court in the case of:
ALEXANDER F. WINTERS and

BASIL R. CRAMPTON,
Appellants,

vs.

DENT HARDWARE COMPANY,
Appellee.

No. 3727

on file, and now remaining among the records of said Court, in my office.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the seal of the said Court, at Philadelphia, this 5th day of November, in the year of our Lord one thousand nine hundred and twenty-eight, and of the Independence of the United States, the one hundred and fifty-third.

SEAL

WILLIAM P. ROWLAND,
Clerk of the U. S. Circuit Court
of Appeals, Third Circuit.

SUPREME COURT OF THE UNITED STATES

ORDER ALLOWING CERTIORARI—Filed December 3, 1928

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Third Circuit is granted. And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.